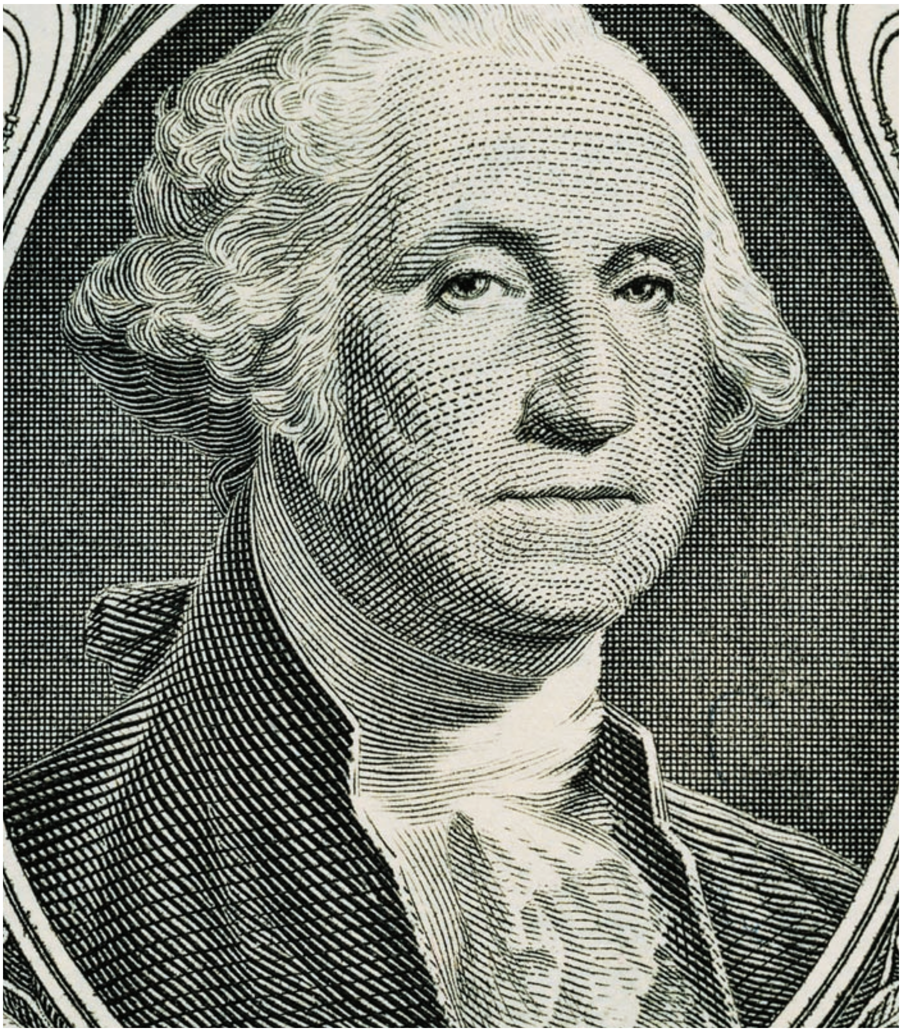
FINANCIAL HISTORY

The magazine of the Museum of American Finance



"Checks & Balances" Exhibit Opens

Three Epochs of Federal Budget Management

Darwin Economics

ISSUE 101 | FALL 2011 | $4.00

FINANCIAL HISTORY

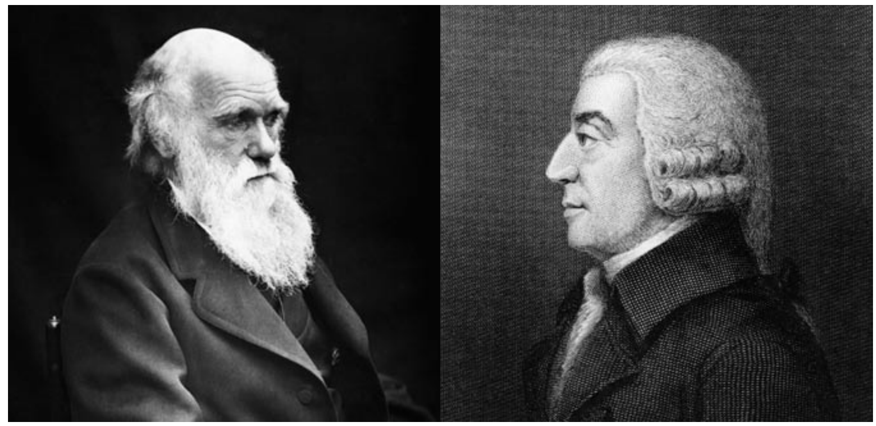
THE MAGAZINE OF THE
MUSEUM OF AMERICAN FINANCE

in association with
the Smithsonian Institution

Issue 101 • Fall 2011
(ISSN 1520-4723)

Kristin Aguilera
Editor

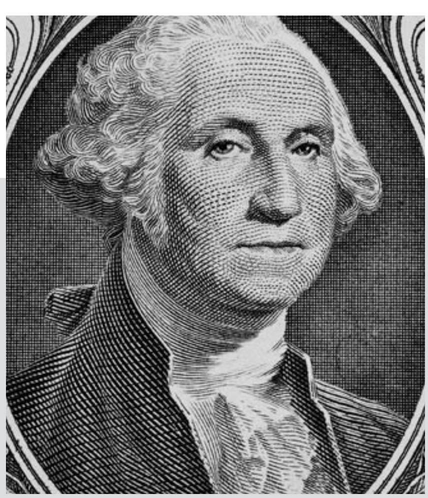
IN THIS ISSUE FEATURES



IN THIS ISSUE DEPARTMENTS

ON THE COVER

President George Washington, as depicted on the dollar bill. See related article on Presidents and American finance, page 20.



Credit: © Lawrence Manning/Corbis

Museum Launches New Exhibits and Educational Program

Financial literacy is alive and well at the Museum. Thanks to a generous anonymous gift, this fall we launched a pilot after school and Saturday program to teach 11th and 12th graders about financial matters.

Message to Members

David J. Cowen | President and CEO

94 students signed up for the 10-week course, which covers not just the basics of personal finance but also includes live immersive experiences like visits to the NYSE floor and the Federal Reserve Bank gold vault. We strive to make finance fun, engaging and not intimidating. Early indications are that the Museum Finance Academy is a great success, and we are seeking funding for the spring and beyond as we strive to make this a permanent program. This initiative supplements our regular class offerings, where we have now taught over 150 classes since launching the Center for Financial Education in 2010.

Our calendar is full this fall with a robust Henry Kaufman Lecture Series, featuring a lineup of first-rate speakers. Over the course of the next few months our headliners include noted Goldman Sachs economist Abby Joseph Cohen, Under Secretary of the Smithsonian Richard Kurin, journalist and author Gretchen Morgenson, former Lieutenant Governor of New York Richard Ravitch and legendary Federal Reserve Chairman Paul Volcker.

Our Lunch and Learn Series has also been active with a half dozen events this fall on topics ranging from the Liberty bonds used to finance World War I to ethical investing. These events are posted on our website, are free to members and are a great way to spend a lunch hour.

This specimen of the $100,000 gold note featuring Woodrow Wilson is on view in "Checks & Balances."

On Election Day, we opened a new exhibition, "Checks & Balances: Presidents and American Finance," which features objects and documents pertaining to the nation's economy and the personal finances of five American Presidents. Among the highlights is a specimen $100,000 gold note bearing the portrait of Woodrow Wilson. In the late fall we will be launching a full online exhibit to supplement the gallery show.

Later this fall we will also install a portion of our "America's First IPO" exhibit in Wells Fargo's Philadelphia museum. This exhibit, which showcases unique items from financial history like the earliest known share certificate, will be our first true traveling show. And through the month of November, we will have on view in our gallery a display in honor of Charles Dow's 160th birthday, which has been a joint effort with the Market Technicians Association.

Exhibit preparations for 2012 are well underway, and we are planning to replace "Alexander Hamilton: Lineage and Legacy" in our featured gallery with an exhibit on the gold standard. We expect to borrow gold objects and works of art from a number of sources to illustrate the story of the gold standard, and we are currently seeking funding for this exhibit.

As always, these programming and exhibition efforts take the support of our membership. We appreciate your donations, and we hope you can see that the money is spent wisely on these incredible programs. As the giving season is approaching, please remember the Museum. $

SEPT 1 1936 The National Association of Securities Dealers (NASD) is incorporated to oversee the conduct of brokerage firms.

SEPT 10 1960 Iran, Iraq, Kuwait, Saudi Arabia and Venezuela begin meeting in Baghdad to form the Organization of the Petroleum Exporting Countries (OPEC).

In Remembrance of Museum Volunteer Ruth Baker

Founder's Letter

John Herzog | Founder and Chairman *Emeritus*

I first met Ruth Baker in the winter of 1997. A retired teacher and principal, she was interested in volunteering at the Museum. We didn't have any volunteers at the time, though we certainly needed some, so we happily accepted her offer. Thus, Ruth began a stellar career as the dean of our volunteer corps, and along the way became a grandma to us all.

For 14 years, Ruth greeted visitors to the Museum every Wednesday at the front desk. She welcomed everyone with a smile, and with an interesting bit of information. She also created several of the Museum's educational materials, from the "Wizard of Oil" middle school guide for the "Rockefeller Rediscovered" exhibit to some of the high school content on entrepreneurship.

My reputation as the local cookie monster was well served with Ruth's terrific baking, and few weeks went by without something delicious. The thank-you conversations became longer, and we each discovered a very lovely, dignified and highly analytical friend, eager to help the Museum achieve the growth and community service we all imagined. Ruth would often take the time to pass on a compliment or criticism, and the Museum benefited greatly from her wise counsel.

Ruth passed away in September at the age of 95. Her granddaughter, Bonnie, wrote to me after our shiva call, when I asked for a photo of Ruth to put up in the Museum. "I know that my grandmother would be so flattered and honored by your proposal. As she often told me, the Museum was her 'lifeline,' a treasured opportunity to connect with young people, with interesting visitors, with ideas and with colleagues who became her true friends. She was grateful for all the years she was able to serve the Museum and its visitors; and the Museum, in turn, gave a great deal back to her."

Museum volunteer Ruth Baker.

Bonnie got it just right. Thank you, Ruth, for all that you gave us. $

CORPORATE AND FOUNDATION SUPPORT

The Museum is most grateful for the support of the following corporations and foundations who have generously provided funding for the Museum in the past year.

- American Express
- Anonymous
- The Asher Family Foundation
- The Briar Foundation
- Carter, Ledyard & Milburn, LLP
- CFA Institute
- CME Group
- Consolidated Edison Co. of New York
- The Curtain Foundation
- Donaldson Fund
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- Friedman Family Foundation
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- Goldman Sachs & Co.
- The Guardian Life Insurance Company of America
- Henry & Elaine Kaufman Foundation
- Herzog & Co., Inc.
- IGS Energy
- ING Americas
- Institute for Private Investors
- Lower Manhattan Development Corporation
- MacDonald & Cie
- The McGraw-Hill Companies
- Morgan Stanley
- The Mountbatten Institute
- Nemco Brokerage, Inc.
- NYSE Euronext
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- Open Society Institute
- Peter G. Peterson Foundation
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- RRE Ventures
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- Saybrook Capital
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- Securities Industry and Financial Markets Assn.
- Shenkman Capital Management
- Muriel Siebert & Co., Inc.
- Standard & Poor's
- The Starr Foundation
- The Stone Foundation
- Twenty-First Securities
- UBS
- Wells Fargo & Company
- Winans International
- Wreyford Family Foundation

► For information about supporting the Museum's activities and programs, please contact Jeanne Baker Driscoll, Director of Development, at 212 908-4694 or jdriscoll@moaf.org.

SEPT 11 1789 Alexander Hamilton is sworn in as the nation's first Secretary of the Treasury.

SEPT 20 1873 The stock market crashes; Western Union falls from 75 to 54½, and the NYSE Board of Governors closes the exchange.

OCT 1 1970 Wal-Mart goes public over-the-counter, issuing 300,000 shares at an initial price of $16.50.

"Checks & Balances" Exhibit Opens on Election Day

On November 8, the Museum opened "Checks & Balances: Presidents and American Finance," an exhibit on the financial challenges faced by American Presidents both in the Oval Office and in their personal lives.

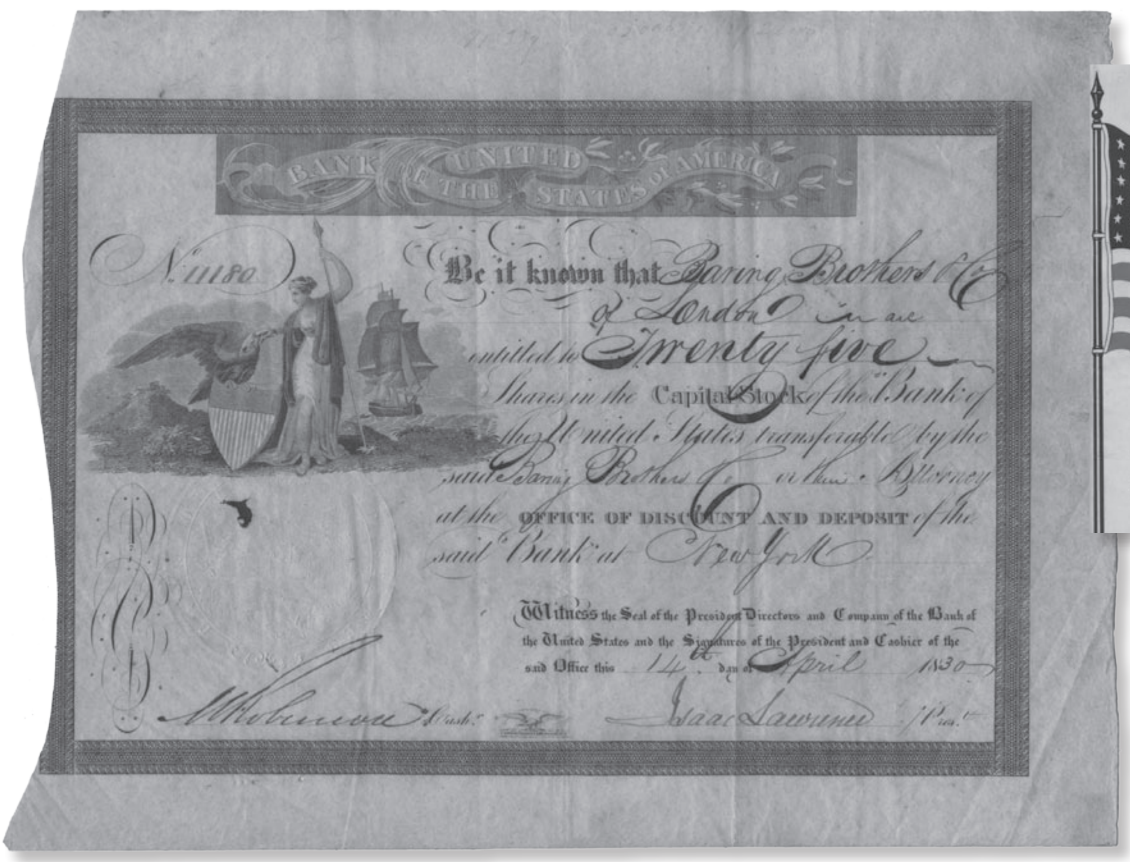
From its inception as an experiment in a new kind of democratic government, the US has faced a panoply of economic and financial challenges. More often than not, it was the President to whom the nation turned to tackle these problems and secure financial prosperity.

Designed as an ongoing series of rotating exhibitions, the inaugural installment of "Checks & Balances" focuses on the national and personal fiscal policies of five of the most well-known Presidents: George Washington, Andrew Jackson, Abraham Lincoln, Franklin Delano Roosevelt and Woodrow Wilson. The exhibit introduces important Treasury secretaries and tracks significant financial markers, such as GDP, presidential salary and the consumer price index. It then delves into the personal finances of the Presidents, including their economic backgrounds and their own banking practices.

Financial historian Robert E. Wright, Nef Family Chair of Political Economy at Augustana College SD, guest curated the exhibit, which was developed and designed by Becky Laughner, Director of Exhibits and Archives, and Maura Ferguson, Director of Exhibits and Educational Programs.

"The exhibition seeks to create a dialogue between the nation's financial past and the present, presenting the legacy and long-term impact of the Presidents' financial policies on today," said Wright.

"Checks & Balances: Presidents and American Finance" is sponsored by Con Edison and will be on display through November 2012. An enhanced "Checks & Balances" online exhibition is scheduled to launch in the late fall. $



(Left) Second Bank of the US shares owned by Baring Brothers, April 1830. Andrew Jackson's veto of the Bank's recharter was the most significant economic action of his administration.
(Right) One of FDR's economic challenges was to raise money for the war effort, as illustrated by this patriotic playbill.

OCT 6 1979 Paul Volcker becomes chairman of the Federal Reserve.

OCT 11 1834 The Boston Stock Exchange opens for trading.

OCT 13 1857 18 banks in New York City suspend payments on loans, setting off the Panic of 1857.

High School Students Develop Healthy Financial Habits In Museum Finance Academy

By Maura Ferguson,
Director of Exhibits and Educational Programs

This fall, the Museum launched the Museum Finance Academy, a 10-week financial literacy course for 11th and 12th graders with the goal of teaching students to aspire to financial independence, develop an appreciation for savings, make financial goals and learn to avoid scams.

In the program, students learn the life cycle of spending and saving which is critical as students leave high school and move on to college or a career. Progress is tracked, and all students who successfully complete the program receive a certificate. The top student of the semester will be awarded a $5,000 college scholarship.

The Academy was launched as a pilot program for the fall 2011 semester and is expected to continue with the second semester beginning in early 2012. The program is offered at no charge to students on a first come, first served basis, and enrollment is limited to 20 students per class.

For more information on the Museum Finance Academy, please visit www.moaf.org/education or call 212-908-4110. $

OCT 29 1929 Black Tuesday. The DJIA plunges 30.57 points to 230.07, an 11.7% drop for the day.

NOV 14 1867 The first stock ticker goes “online,” making continuous nationwide transmission of stock prices possible for the first time.

NOV 14 1972 The Dow Jones Industrial Average closes above 1000 for the first time. It finishes the day at 1003.16.

Museum Adds North Africa Note to Collection

Museum of American Finance

By Lauren Marchisotto

The Museum has a new addition to its "Money: A History" exhibit: a North Africa, small-size silver certificate. Although silver certificates have been in use since the 19th century, these small-size certificates were not introduced until 1928. Prior to their introduction, larger format certificates were issued. The North Africa notes were printed in $1, $5 and $10 denominations. Despite the deceiving name, this emergency note, donated to the Museum by David F. Noyes, was in fact US currency. The name of the North Africa note refers to the location of the US troops where they were first distributed.

These types of silver certificates were issued during World War II (from 1942–1944) so that United States troops had access to US currency while fighting abroad in Africa and Europe, which were unstable areas. The main purpose of the notes was that they could be easily identified and declared invalid in the event that the troops and their surrounding areas were captured. If that were to happen, then the notes could no longer be used to further the causes of US enemies by either using the currency directly or making counterfeit copies once they were devalued.

North Africa notes were not the only kind of small-size currency issued during this turbulent period. Due to fear of the capture and occupation of the Hawaiian Islands by the Japanese, the US government also distributed small-size silver Hawaii notes in denominations of $1, $5 and $10. Hawaii was also issued $20 Federal Reserve notes.

Although at first glance the emergency notes looked similar to US currency, it was simple to discern the differences of these certificates from standard US currency. The feature that stands out the most is that each type of note was distinguished by the unusual color of the seals. Standard silver certificates had blue seals, while the North Africa notes had yellow seals and Hawaii notes had brown seals. In the case of the Hawaii notes, an additional marking of the word "Hawaii" was added in small block letters on the front and in larger outlined letters on the back. In an effort to streamline the nation's currency in the 1960s, they were discontinued. $

The Museum would like to thank David F. Noyes for his recent donation, which also included Liberty Loan receipts signed by his great grandfather, George Washington Noyes. Mr. G. Noyes was Treasurer of the City Five Cents Savings Bank in Haverhill, MA.

NOV 14 1986
Ivan Boesky, one of Wall Street's top traders, settles with the government on charges of securities fraud, implicating Michael Milken of Drexel Burnham Lambert in an insider-trading scheme.

NOV 19 1792
In the same room where the Declaration of Independence was adopted 16 years earlier, the Insurance Company of North America holds its IPO at $10 per share.

Unlocking Value at Biltmore Estate

By Brian Grinder and Dan Cooper

The surviving mansions built by the descendants of Cornelius Vanderbilt during the Gilded Age are fascinating. In the late 1990s, my co-author Dan lived in a large house on the west side of the Hudson River known as the Aberdeen Mansion of West Park, NY. Directly across the river from the Aberdeen stands the Vanderbilt mansion of Hyde Park, which was built by Frederick Vanderbilt in the late 1890s and is now owned and operated by the National Park Service. I [Brian] spent a couple of summers out in New York working with Dan at Aberdeen and never tired of the view across the river of the Vanderbilt mansion. One of our colleagues mentioned there was another Vanderbilt mansion in North Carolina known as Biltmore Estate that was much larger than the Hyde Park house. While the thought of a larger Vanderbilt home intrigued me, I couldn't imagine traveling to North Carolina just to visit such a place. Last summer, however, I had the opportunity to attend my nephew's wedding in Wilmington, NC, and although Biltmore Estate is on the other side the state, I took the opportunity to finally visit this Gilded Age wonder.

Upon arriving at Biltmore, we were given a copy of the *Biltmore Map & Guide* which contains an interesting statement: "In 1895, George Vanderbilt created Biltmore as an escape from everyday life for his family and friends. Today, his descendants invite you to enjoy the Vanderbilt legacy of hospitality on the 8,000 acre estate…" George Vanderbilt's family members still own the estate? What a surprise! Most historic homes are no longer owned by descendants of the builders but are either administered by a federal agency or held in trust by a non-profit organization. Biltmore Estate, however, is operated as a for-profit organization. This was intriguing to me, and I had to know more about how this all came about.

George Washington Vanderbilt, II was the youngest son of William Vanderbilt and the grandson of Cornelius Vanderbilt. Biltmore's forester, Gifford Pinchot[1], described him as "…a lover of art and of the great outdoors, a slim, simple and rather shy young man, too much and too long sheltered by female relatives, enormously rich, unmarried, but without racing stables or chorus girls in his cosmos. Biltmore was his heart's delight." This bookish young man, who would eventually amass a library of 23,000 books written in eight different languages, first visited the Asheville, NC area during the winter of 1888 with his mother. Later that year, he began buying land in the area and commenced building the house in 1889.

George Vanderbilt's Biltmore Estate in Asheville, NC, circa 1930.

Biltmore Estate's ancient Norman banquet hall, with a triple fireplace, Gobelin tapestry draped walls and marble sculptures.

The house was designed by Richard William Morris Hunt, America's foremost architect at the time, and landscaped by none other than Frederick Law Olmstead, the designer of New York City's Central Park. Although it was still unfinished, Vanderbilt moved into the house in 1895 and invited his family to join him for Christmas at Biltmore.

Vanderbilt wed Edith Stuyvesant Dresser in 1898, and their daughter Cornelia was born in 1900 at Biltmore. That year, although the house was still unfinished, construction came to a halt. The family was either wearying of the construction noise, or more likely George was running out of money. Two rooms on the main floor, the sitting room and the music room, would remain unfinished for decades. Even in its unfinished state, the house was impressive boasting 175,000 square feet, four acres of floor space, 255 rooms, 34 bedrooms, 43 bathrooms and 65 fireplaces. A swimming pool, gymnasium, bowling alley, servants' quarters and kitchens could all be found in the basement. Arthur T. Vanderbilt, II wrote a telling description of the house: "Like the grand finale of a Fourth of July fireworks display, George Vanderbilt's Biltmore was the biggest and most startling of the Vanderbilt mansions. It was overwhelming. And it was the end. One by one, the mansions now would begin to fall."[2]

The Vanderbilts made Biltmore their primary home until 1912, when they purchased a house in the Washington, DC area. This house was much less expensive to maintain and was closer to the social and political activities of the nation's capital. George Vanderbilt died unexpectedly in 1914 of complications from appendicitis, leaving his wife to manage Biltmore for Cornelia, who was to inherit the estate on her 25th birthday. Junius Adams, a local Asheville lawyer, took over the day-to-day management of the estate and developed the dairy farm into Biltmore's primary money maker.

Cornelia was never terribly interested in Biltmore. She married British diplomat John Cecil in 1924, and the two of them opened Biltmore to the public for the first time in 1930. Even though they charged an admission fee of $1.50 per person, the house failed to pay for itself; profits from the dairy covered shortfalls for many years.[3] After the Cecils divorced in 1934, Cornelia packed up their two children, George and William, and moved to Europe never to return to the United States or Biltmore. After the divorce John Cecil returned to Biltmore and lived there until his death in 1954.

Both George and William Cecil eventually returned to Biltmore Estate. George managed the dairy while William helped manage the house and gardens. He alone saw potential in the old Gilded Age chateau. Historian Howard E. Covington, Jr. recounts a conversation William Cecil had with David Rockefeller, who asked him what he planned to do with the "white elephant" in North Carolina. Cecil told him, "I'm going to turn it into a black elephant." To which Rockefeller replied, "Can't be done. I've tried it at Williamsburg."

Biltmore Estate was more than just a Gilded Age monstrosity to William Cecil. It was an architectural marvel that was filled with magnificent artwork including 16th century tapestries and paintings

by the likes of Renoir and John Singer Sargent. In the huge library, Giovanni Pellegreni's *Chariot of Aurora* graced the ceiling. These assets, along with the garden and grounds, were of great value, and Cecil was convinced they could be harnessed to generate a profit.

Upon the death of Junius Adams in 1962, William Cecil took over management of the house and gardens and began to attend to necessary items such as routine maintenance. He also hired a curator, increased the marketing budget substantially and streamlined admissions procedures. In 1969, the house and garden produced its first profit of $16.34. Cecil's idea was to generate profits in order to preserve the estate. This was very far from the thinking of most other historic sites which were operated as non-profit institutions, but Cecil was an oddity. While most historic home preservationists concentrated on Revolutionary War era or Civil War era landmarks, Cecil focused on preserving a home from the decadent Gilded Age. Furthermore, Cecil's for-profit position was nothing short of scandalous.

Cecil knew he had to strike a balance between preservation and profits. His English upbringing brought with it a sense of decorum that prevented the development of gift shops and restaurants on the grounds of Biltmore for many years.[4] With an eye towards preservation, Cecil finally finished the sitting room and the music room in the 1970s. These rooms attracted additional visitors, as did the initiation of "Christmas at Biltmore" in 1975. Prior to this, the estate closed down during the Christmas season, but the additional December operating hours proved popular and generated significant revenues.

The basement was opened to the public in 1980 after George and William agreed to split up the Biltmore Company. George got the dairy, and William was left with the house and 8,000 acres. He could no longer count on the dairy to subsidize the house, but the new basement tour, which cost an additional $3 per person, helped to attract more visitors and improve the bottom line. Cecil also began producing wine on the estate in the late 1970s. Knowing next to nothing about the art of winemaking, Cecil went from making a wine with an "unpleasant aftertaste" to producing award-winning wines that have helped enhance the reputation of North Carolina's wine industry.

"Do you know what my problem is? I have a hundred ideas a day, I know they're not all good, but my problem is I think they are."

—William Amherst Vanderbilt Cecil

At the centennial celebration of the opening of Biltmore in 1995, William Cecil surprised everyone by announcing his retirement. His son William (Bill) Cecil, Jr. now manages Biltmore and has continued in the tradition of his father by building a hotel on the grounds of the estate and developing Antler Hill Village around the winery. According to Covington, William Cecil's "'yeasty mix of ideas'… transformed Biltmore House and Gardens from an expensive drain on the family-owned business into a potential profit center with annual revenues of $3.5 million."

The estate now attracts more visitors than Mount Vernon or Monticello. In fact, many historical sites such as Mount Vernon now look to Biltmore as a model. William Cecil was successful because he saw value where no one else did and acted on his vision even though others thought he was crazy. In the process, he changed the way historic sites are managed, carved out opportunities for his children and preserved a valuable shrine to the Gilded Age for future generations. $

Brian Grinder is a professor at Eastern Washington University and a member of Financial History's *editorial board. Dr. Dan Cooper is the president of Active Learning Technologies.*

Sources

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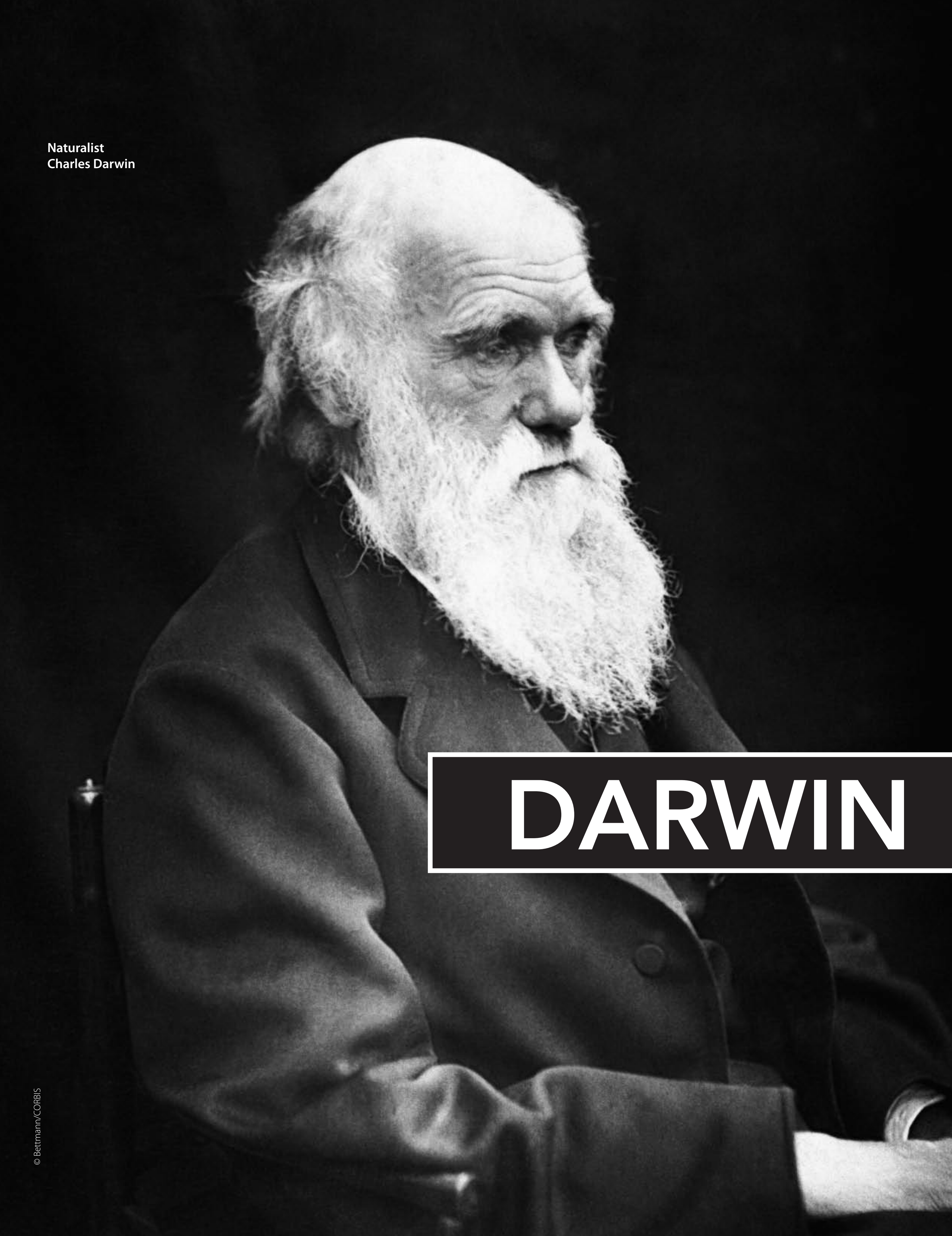
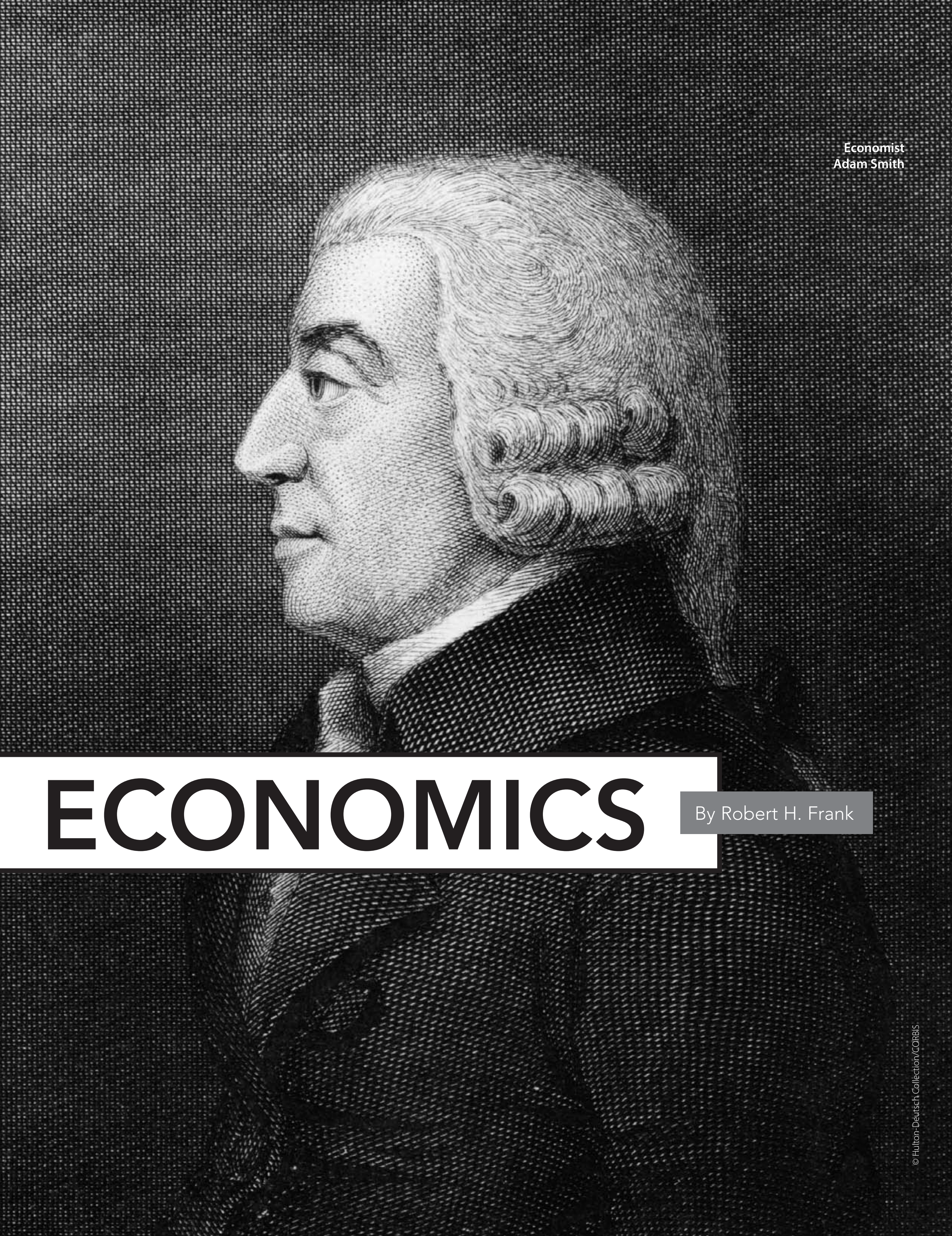
Notes

1. According to Bryan (1994), Gifford Pinchot launched "both his career and the forestry profession under Olmstead at Biltmore," where he established the first managed forest in America.
2. T.J. Stiles (2009) describes Biltmore and the other homes built by Cornelius Vanderbilt's descendants as "monuments to an outrageous self-indulgence that the Commodore would have scorned…"
3. According to Covington (2006), most historic homes charged about 25 cents. Today, Biltmore still charges more than other historic venues with an at-the-door admission price of $55 per person. By way of comparison, the Hyde Park mansion, built by George's older brother Frederick, currently charges $8 per person.
4. Covington (2006) relates Cecil's reaction to the suggestion that the estate start selling t-shirts with the Biltmore logo on them. Cecil snorted, "I'll be damned if I'll sell underwear." He did, however, agree to sell polo shirts.


Naturalist
Charles Darwin

DARWIN



Economist
Adam Smith

ECONOMICS

By Robert H. Frank

I was born in 1945. When someone my age makes a prediction about something that will happen 100 years from now, he needn't worry about being teased by friends if it doesn't pan out. Without trepidation, then, I offer the following prediction. One century hence, if a roster of professional economists is asked to identify the intellectual father of their discipline, a majority will name Charles Darwin.

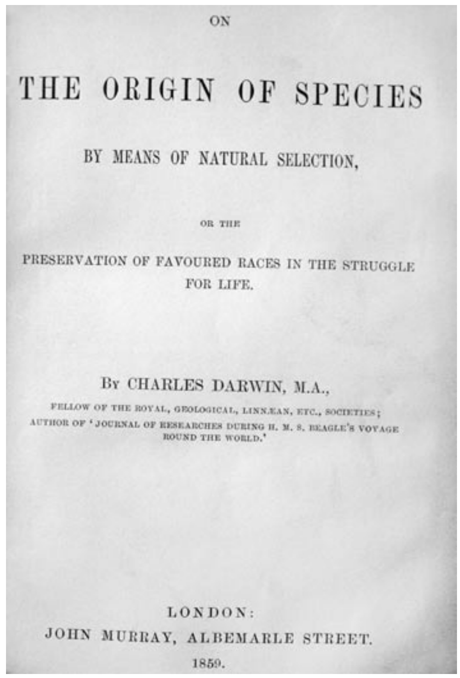
If the same question were posed today, more than 99% of my colleagues would name Adam Smith. My views about Darwin's significance reflect no shortage of admiration for Smith on my part. On the contrary, reading any random passage from the 18th-century Scottish moral philosopher's masterwork, *The Wealth of Nations*, still causes me to marvel at the depth and breadth of his insights.

Darwin was himself no slouch, obviously, yet few people outside academic departments of biology and economics associate his name with ideas in economics. Those who have studied Darwin's theory of evolution carefully, however, realize that he was in fact heavily influenced by the works of the economists Thomas Malthus and David Ricardo. Malthus had been a student of Smith's, and Ricardo was heavily influenced by *The Wealth of Nations*. So even if my prediction comes true, Smith's fans can still justifiably think of him as the great-grandfather of economics.

I base my prediction on a subtle but extremely important distinction between Darwin's view of the competitive process and Smith's. Today Smith is best remembered for his invisible hand theory, which, according to some of his modern disciples, holds that impersonal market forces channel the behavior of greedy individuals to produce the greatest good for all. This characterization is an oversimplification, but it captures an important dimension of Smith's understanding of the competitive process. In any event, it is fair to say that the invisible hand theory's optimistic portrayal of unregulated market outcomes is the bedrock of anti-government activists' worldview. They believe regulation is unnecessary because they believe unbridled market forces can take care of things quite nicely on their own.

Darwin's view of the competitive process was fundamentally different. His observations persuaded him that the interests of individual animals were often profoundly in conflict with those of their own species. In time, I predict, the invisible hand will come to be seen as a special case of Darwin's more general theory. Many of the libertarians' most cherished beliefs, which are perfectly plausible within Smith's framework, don't survive at all in Darwin's.

Even so, the invisible hand theory was a genuinely revolutionary insight, all the more so because in hindsight it seems so obvious. Why does a business owner go to the trouble of designing a new product that consumers are likely to find appealing? Why does he invest such effort to revamp his production process to reduce costs? The motive, as Smith and undoubtedly many before him clearly saw, was simply to make more money. What others did not see clearly was the responses those actions would provoke from rival business owners, and how the ensuing dynamic would produce outcomes very different from the ones intended.


ON

THE ORIGIN OF SPECIES

BY MEANS OF NATURAL SELECTION,

OR THE

PRESERVATION OF FAVOURED RACES IN THE STRUGGLE FOR LIFE.

By CHARLES DARWIN, M.A.,

FELLOW OF THE ROYAL, GEOLOGICAL, LINNÆAN, ETC., SOCIETIES; AUTHOR OF 'JOURNAL OF RESEARCHES DURING H. M. S. BEAGLE'S VOYAGE ROUND THE WORLD.'

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1859.

Title page of Charles Darwin's revolutionary book, *The Origin of Species*, published in 1859.

If one producer comes up with a cheaper way of manufacturing a product, he can cut his price slightly and steal market share from his rivals. In the short run, his profits soar, just as he'd hoped. But the loss of market share by rival firms gives their owners a powerful incentive to mimic the original cost-saving innovation. And once the innovation spreads industry-wide, the resulting competition drives the product's price down to a level just sufficient to cover the new, lower production costs. The ultimate beneficiaries of all this churning are consumers, who enjoy steadily improved products at ever lower prices.

Smith was well aware that unregulated markets didn't always produce the best outcomes. For the most part, the market failures that were his focus involved underhanded practices by business leaders in a position to wield power. When markets failed, in Smith's view, it was because of an absence of effective competition. A firm might deceive its customers about the quality of its offerings; or it might cut prices to drive rivals out of business, only to raise prices again once they were gone. Such abuses were common in Smith's day and, though less frequent now, remain part of the landscape.

Social critics on the left have long focused on anti-competitive behavior as the key to understanding why markets fail. The late John Kenneth Galbraith, for example, stressed the contrast between the "traditional sequence" envisioned by Smith's modern disciples and a "revised sequence" that Galbraith saw as a more accurate portrayal of the modern marketplace. In the traditional sequence, consumers enter the market with well-formed preferences, and firms struggle to meet their demands as well and cheaply as possible. But in Galbraith's revised sequence, powerful corporations first decide which products would be most convenient and profitable for them to produce, and then hire Madison Avenue hucksters to persuade consumers to want those products.

Many economists remain skeptical about this account, citing conspicuous examples of corporate failure, such as the Ford Edsel in Galbraith's day. Ford introduced the Edsel with great fanfare in September 1957. Its outsized promotional budget included a widely-viewed national television special, "The Edsel Show." But customers never showed much enthusiasm for it and production was discontinued in 1960. More recently, Microsoft spent almost a billion dollars to develop and promote the Kin, a smartphone targeted at the youth market. The phone, which hit stores in April 2010, was unceremoniously pulled from shelves 45 days later because of abysmal sales.

Notwithstanding such failures, there is little doubt that advertising campaigns

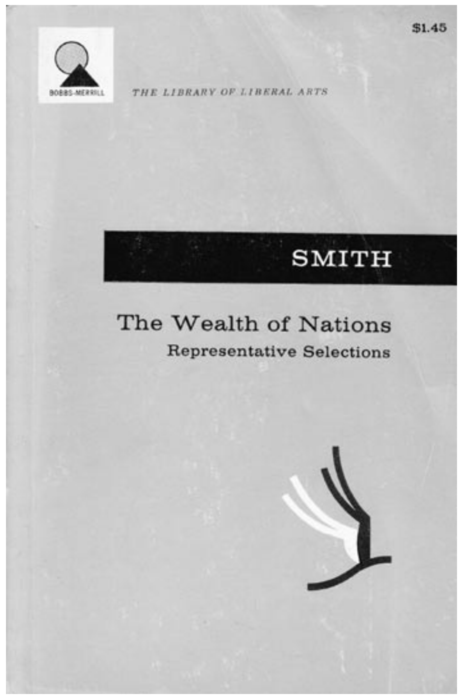
can shift consumer tastes. But from the perspective of those who are skeptical about markets, advertising wizardry is a two-edged sword. The driving force behind the invisible hand is greed, and if producers are currently selling inferior products at inflated prices, there is cash on the table. If a rival producer could let consumers know that a better, cheaper model was available, he could make lots of money. Modern marketing methods are surely up to that task. Competition is obviously still far from perfect, but today's markets are much closer to the perfectly informed, frictionless ideal than were those of Smith's day.

Darwin trained his sights on competition not among merchants but among members of plant and animal species. But the two domains, he realized, share deep similarities. Darwin's analysis revealed a systemic flaw in the dynamics of competition. The failures he identified resulted not from too little competition, but from the very logic of the process itself. The central premise of his theory was that natural selection favored variants of traits and behaviors insofar as they enhanced the reproductive fitness of the individual animals that bore them. If a trait made the individual better able to survive and reproduce, it would be favored. Otherwise, it would eventually vanish. In many cases, Darwin recognized, the same variant that served the individual's interest would also serve the interests of its species. But he also saw that many traits promoted individual interest to the detriment of the species.

As an example in the former category, consider the speed of the gazelle. Mature members of this species can sustain speeds of 30 mph for extended periods and can reach 60 mph in short bursts. How did they become so fast? Gazelles are fast because they evolved in an environment in which being faster than others was often decisively advantageous. The gazelle's predators, which include the cheetah, are also very fast, and there are few places to take shelter on the terrain where both groups evolved. Slower genetic variants among the modern gazelle's ancestors were more likely to be caught and eaten.

Since the selective pressure that forged speed in gazelles was the threat of being caught by predators from other species, greater speed posed no conflict between the interests of individual gazelles and those of gazelles as a species. Up to some point, being faster conferred advantages for both individual and species. With respect to this particular trait, then, Darwin's natural selection narrative closely tracks Smith's parallel invisible hand narrative about the proliferation of cost-saving innovations and attractive new product designs.

Many other traits, however, increase the reproductive fitness of each individual



Adam Smith's *The Wealth of Nations* has for centuries been considered the bible of economics.

while simultaneously imposing significant costs on the species as a whole. Such conflicts are especially likely for traits that confer advantage in an individual's competition with members of its own species.

A case in point is the outsized antlers of bull elk. These antlers function as weaponry in the competition among bulls for access to females. Because a mutation that coded for larger antlers made a bull more likely to defeat its rivals, it was quick to spread, since these bulls won access to many cows, each of whose calves carried the mutation. Additional mutations accumulated over the generations, in effect creating an arms race. The process seems to have stabilized, with the largest antlers of North American bull elk measuring more than four feet across and weighing more than 40 pounds. Although each mutation along this path enhanced individual reproductive fitness, the cumulative effect of those mutations was to make life more miserable for bull elk as a group.

The conflict between individual and species arises because reproductive fitness is essentially a relative concept. Under natural selection, the traits that succeed are those that confer relative advantage. To spread, it is not sufficient that a genetic variant be helpful. It must be *more* helpful than the other variants with which it is competing. A trait that evolves because it helps the individual compete against members of the same species typically constitutes a handicap for the species as a whole.

Darwin's central insight does a lot of the heavy lifting in my project to take the libertarian's basic principles as my starting point and then explore what those principles imply about the kind of government that freedom-loving people might choose for themselves. Their choice clearly depends heavily on the kinds of outcomes they can expect from unbridled competition in the marketplace. Libertarians' expectations have been guided by Smith's invisible hand narrative and its presumption of perfect competition. In the natural environments that were Darwin's concern, the kinds of impediments to competition that worry traditional market skeptics were almost completely absent. Yet Darwin's understanding of the competitive process itself supports a profound measure of skepticism about market outcomes. It is instructive to examine more closely how that understanding causes the invisible hand account to falter.

The libertarian's faith in unregulated markets rests on several premises. Two of the most important are that consumers are well informed and that markets are competitive. Unless we insist on reading these premises literally, there is nothing in Darwin's framework that challenges either of them. Of course, with so many millions of products and services available, no consumer could possibly be well informed about every option. But they are reasonably well informed, or could choose to become so, about the options most likely to be important. Similarly, no market could possibly satisfy all the stringent conditions required for perfect competition — completely free entry and exit and a large number of firms producing identical, standardized products, each serving only a small share of the market. Yet most markets are workably competitive, in the sense

that if a clearly better option were possible, an entrepreneur would eventually step forward and make consumers aware of it.

In short, Darwin's challenge has nothing to do with the kinds of competitive imperfections traditionally invoked by market skeptics. If libertarians were going to empower the state to regulate firms in any way, it would not be because of any evidence that markets were insufficiently competitive.

But Smith's invisible hand narrative also requires some additional assumptions, ones that available evidence should lead any reasonable person to question. One is that people are rationally attentive to all relevant costs and benefits of the various options they consider. Another is that to the extent that material resources matter for well-being, it is absolute income that counts, not relative income. Compelling evidence suggests that both assumptions fail in ways that undermine the invisible hand narrative. The implications of the second assumption's failure are especially problematic.

As concerns the first assumption, a large body of research has demonstrated that people are not attentive to costs and benefits in the manner required by traditional theories of rational consumer behavior. For example, people tend to be attentive even to small costs and benefits that are certain to affect them immediately, but tend to give short shrift even to large costs and benefits that are either uncertain or occur with significant delay. People also exhibit a systematic tendency to treat gains very differently from losses. That asymmetry is not irrational per se, but its magnitude often leads to outcomes that are unattractive from the decision maker's own point of view.

We can't pretend to understand how markets function unless we begin with a reasonably accurate portrait of the structure of human motivation. Human motivation resides in the brain, which has been evolving for millions of years. Its proximate purpose in every generation was to guide its bearer to take the actions that would best promote the transmission of its genetic blueprint into the next generation. The Darwinian framework is the only scientific framework available for trying to understand why humans and other animals are motivated to behave as they do.

Human motivation is complex and multidimensional. When economists try to model it in an attempt to understand how markets work, they are forced to adopt stick-figure simplifications. But some of those simplifications have been extreme. Most economists, for example, assume that people are purely selfish, even though there is compelling evidence for motives that transcend narrow self-interest. Most also assume that the satisfaction people take from consumption depends only on the absolute amount of it, even though there is compelling evidence that relative consumption also matters.

Experience confirms that psychological reactions to many consumption experiences depend heavily on the context in which those experiences occur. Some people, for example, derive pleasure from the experience of driving a fast car. But how fast does a car have to be to deliver that pleasure? It's impossible even to think about that question without knowing something about the relevant context. In the 1920s, a car would have seemed fast if it could reach 60 mph eventually. But as the years have passed, the standards that define fast have changed considerably. In 2011, the Porsche 911 Turbo reaches 60 mph in less than three seconds. *That's* fast. But it won't seem fast forever.

Further evidence of the importance of relative position comes from studies of the determinants of happiness, or subjective well-being. Early investigators found that whereas measured average happiness levels within a country tend to be highly stable over time, even in the face of significant economic growth, individual happiness levels within any country at a given moment of time depend strongly on income. Recent work documents a robust negative association between individual happiness measures and average neighborhood income, a link that does not appear to stem from selection bias or other statistical artifacts.

In sum, no economic model can hope to capture how markets actually function unless it begins with the assumption that context shapes evaluation in significant ways. Yet the models that underlie Adam Smith's invisible hand narrative assume, preposterously, that context doesn't matter at all. And it's not just libertarians and right-wing zealots who embrace that assumption. The very same models underlie all economic forecasting and policy analysis done in government for more than a century.

In the more than 30 years I have been writing about positional concerns, the most frequent response from those on the right has been to accuse me of trying to incite class warfare. They dismiss positional concerns for the same reason they dismiss the preferences of sadists. But bringing positional concerns into the conversation is nothing remotely like giving policy weight to the preferences of sadists. We can all agree that society has a legitimate interest in discouraging negative emotions like envy and jealousy. Because there will always be someone out there with more and better stuff, being preoccupied with that fact would be a sure recipe for unhappiness. Teaching our children not to envy the good fortunes of others is a worthwhile project.

But such teachings, even if completely successful, will not eliminate the consequences of wasteful spending prompted by concerns about relative position. Such waste stems far less from envy than from the fact that many important rewards in life depend on relative consumption. In any event, tax remedies for positional externalities are no more an endorsement of envy than speeding tickets are an endorsement of driving too fast. $

This article was adapted from The Darwin Economy *by Robert H. Frank (Princeton University Press, September 2011). Frank is an economics professor at Cornell's Johnson Graduate School of Management, a regular "Economic View" columnist for* The New York Times *and a Distinguished Senior Fellow at Demos. His books, which have been translated into 22 languages, include* The Winner-Take-All Society *(with Philip Cook),* The Economic Naturalist, Luxury Fever, What Price the Moral High Ground? *and* Principles of Economics *(with Ben Bernanke).*

Harry Markowitz

Father of Modern Portfolio Theory

STILL DIVERSIFIED

By Alan Lavine

Harry Markowitz's Nobel Prize winning Modern Portfolio Theory was put to the supreme test in The Great Recession of 2008. The stock market plunged nearly 40%, stock and corporate bond markets crashed, the money markets froze up. Uncle Sam had to bail out major banks, while letting Bear Stearns and Lehman Brothers fail.

It raised the big question: Does Modern Portfolio Theory hold up during once-in-a-lifetime events?

"It is sometimes said that portfolio theory fails during a financial crisis because all asset classes go down and all correlations go up," Markowitz said in a telephone interview from his office in San Diego, CA.

But this, stressed the Ph.D. winner of the Nobel Prize for economics, is already predicted by his Modern Portfolio Theory.

"Generally, asset classes move roughly in proportion to their historical betas," he said. The beta value is a measure of how risky an asset is in relation to the overall stock market. The S&P 500, for example, has a beta value of one. So a stock or mutual fund that has a beta value greater than one will lose more money when the market declines than a stock that has a beta value less than one.

Portfolio managers that limited risk during the 2008 recession kept a percentage of their portfolios in US Treasury bonds and gold bullion. These investments performed well while stocks worldwide and high-yield corporate bonds plunged, Markowitz says.

For over six decades, "MPT," as Modern Portfolio Theory is nicknamed, has provided money managers and sophisticated investors with a tried-and-true way to select portfolios.

Markowitz's work is the key to squeezing the best returns with the least amount of risk out of portfolios of different asset classes. It analyzes the effects of asset risk, correlation and diversification on expected portfolio returns. But much depends upon how you split up your investment pie, Markowitz stresses.

Markowitz, at 84 years old, teaches his landmark Modern Portfolio Theory at the Rady School of Management at the University of California, San Diego. He is also working on a book and consulting with companies, such as Index Fund Advisors, an investment advisory firm, and Guided Choice, advisor to 401(k) plan sponsors.

Markowitz was born an only child in Chicago in 1927. His parents, Morris and Mildred, owned a neighborhood grocery story. Because his family was in the food and dry goods business, he was not severely affected by the Great Depression. Like other boys his age, he liked playing basketball and football. He also played the fiddle in the high school orchestra and liked reading comic books. But in high school, he took to studying physics and astronomy. He also read the philosophy of David Hume and Charles Darwin's *The Origin of Species*.

Markowitz said he had no plans to go into economics when he graduated from the University of Chicago after completing a Bachelor's degree in two years. He was fascinated with the economics of uncertainty, and credits a course on "Observation, Interpretation and Integration" with having a strong impact on him.

Modern Portfolio Theory did not emerge from a vacuum. The use of statistical methods has its roots in the 17th and 18th centuries. Christian Huygens, in 1657, published a work on the calculus of probabilities, based on communications with French mathematicians Blaise Pascal and Pierre de Fermat. Swiss mathematician Johann Bernoulli published studies on mathematical expectations. Work by English mathematician Thomas Bayes in 1763 determined probabilities based on observed frequencies could be applied to social decision making. In 1812, a Pierre-Simon Laplace book, *The Analytic Theory of Probabilities*, revealed probability estimates could be used to solve many different types of problems.

In the early 20th century, many of the faculty members in the economics department of University of Chicago emphasized

mathematics in economic decision-making. His mentors included renowned faculty members Leonard Savage, Tjalling Koopmans, Milton Friedman and Jacob Marschak.

One study, published by Milton Friedman and Leonard Savage in *The Journal of Political Economy* in August 1948, especially influenced him. The study, "The Utility Analysis of Choices Involving Risk," revealed that when individuals choose occupations, investments or business ventures, they essentially make one of two decisions. They either take risks or play it safe. Also influencing his thinking was Tjalling Koopmans' graduate course on activity analysis.

While working on his Ph.D., Markowitz was invited to become one of the student members of the Cowles Commission for Research in Economics, now the Cowles Foundation at Yale University in New Haven, CT. The commission, affiliated with the University of Chicago from 1939 to 1955, fosters the development and application of rigorous logical, mathematical and statistical methods of analysis in economics. Economist Alfred Cowles III, its founder, was a fellow and treasurer of the New York-based Econometric Society, an international society for the advancement of economic theory in relation to statistics and math. Cowles, whose grandfather was a founder of *The Chicago Tribune*, applied statistical techniques to compare financial performance.

Markowitz said his experience working on the Cowles Commission helped him get an idea for his dissertation. While waiting to see his dissertation advisor, Jacob Marschak, he began chatting with Marschak's stockbroker, who also awaited Marschak. Markowitz already had learned from Marschak about using probability mathematics to study the elasticity of demand for money and the relationship of money to wealth. So he naturally expanded that idea to financial market performance.

Markowitz got some basic ideas of portfolio theory while reading John Burr Wiliam's book, *Theory of Investment Value* (Fraser). Williams' book stressed that the value of a stock should equal the present value of future dividends that a company is expected to pay shareholders. He began applying probabilities to determine the risk and return of portfolios.

Investors already had been spreading their risks ever since the first bull market on Wall Street in 1792. But the investments were often more highly correlated and riskier than anticipated. The reason was that they failed to use the tools to mathematically evaluate performance relationships.

Markowitz believed variance should be used as a measure of risk in conjunction with expected rates of return on a portfolio of stocks. The expected rate of return, simply put, is the average of the probability distributions of returns. The variance, or standard deviation, which is the square root of the variance, measures how far the numbers spread out from each other.

"Variance came to mind as a measure of risk," Markowitz said. "The fact that portfolio variance depended on security covariance added to the plausibility of the approach. Since there were two criteria — risk and return — it was natural to assume that investors selected from the set of optimal risk-return combinations."

In the 1959 edition of his book, *Portfolio Selection* (Blackwell), Markowitz explained that that variance does not go to zero when risks are correlated. Variance can be substantial even if correlations are just .1 to .3 among securities, on average.

Markowitz said investors should estimate the likely returns, risks and correlations among various asset classes and use these inputs to conduct a Modern Portfolio Theory analysis. This produces a curve of "efficient" risk-return combinations. If you want greater return on average, you have to take on greater risk. If you want less month-to-month and year-to-year fluctuations, you have to accept less return on the average in the long run.

In 1989, Markowitz won the John von Neumann Theory Prize by the Institute for Operations Research and Management Sciences, a Hanover, MD organization dedicated to applying scientific methods to help improve decision-making, management and operations. The honor was for his research on portfolio theory, sparse matrix analysis to solve simultaneous equations and SIMSCRIPT, which is used to program computer simulations in business and war games.

His dissertation, "Portfolio Selection: Efficient Diversification," was published in the *Journal of Finance* in 1952 and in book form in 1959. That work won him the Nobel Prize in economics in 1990.

Though this sounds glorious, it wasn't easy sailing in 1955 when he defended his dissertation. At the time, he was working for the Cowles Foundation. Economist Milton Friedman argued that portfolio theory was not economics, so Markowitz should not be awarded his Ph.D. But after a short debate by the dissertation committee, the work was approved.

"At the time I defended my dissertation, portfolio theory was not part of economics," he said. "But now it is."

Markowitz looks at the world based on utility and personal probability. When he goes for daily lunchtime walks, he notices license plate numbers and routinely calculates the probability of seeing the same number reoccur. For example, the probability of seeing a license plate with four of a kind such as 6666 is one in one thousand, he said. But every year, if you walk enough you will see another license plate with four of a kind. It's the same, he said, with the stock market.

Markowitz advocated optimizing portfolios to get the best return per unit of risk by using asset correlations dating back to 1926, rather than short-term and current correlations. History tends to repeat itself, he believes, but not in the same sequence. So there is always a chance the investor could experience losses similar to 1929, 1982, 2002 and 2008.

"Personally I think that nature draws from the basket known as the S&P 500 randomly every year," he said. "The stock market losses in 2008 have a probability of occurring about once out of every 40 years. The 38.5% loss on the S&P 500 was more than 2.5 standard deviations below the mean."

Yes, the 2008 market crash could happen again, he said, but you don't know when. The losing cards are in the deck.

Markowitz's famous portfolio theory for allocating assets was refined by later research. The Capital Asset Pricing Model, designed by William Sharpe in 1963, gave money managers an extra measure of risk to consider. Sharpe's theory considers systematic risk, or how an asset moves in relation to the overall market. Under Sharpe's theory, systematic risk is measured by a portfolio's "beta" value.

Additional refinements were devised by Eugene Fama and Kenneth French in 1995. They fine-tuned the model to account for investment styles, such as large company, medium-sized company and small company growth and value stocks. So to reduce volatility today, financial advisors often use Modern Portfolio Theory to construct

portfolios and incorporate a wide range of United States and overseas asset classes.

Markowitz says that investors concerned about re-experiencing large market losses should optimize portfolios with the idea of trading off some return for less risk. Such portfolios would have lost less in 2008, and they would have hit their break-even point in a shorter period.

For example, the S&P 500 lost 38.5% in 2008, and higher beta emerging markets asset class indexes fell 54%, he said. Corporate bonds fell in value, but much less than stocks, and government bonds rose in value. The five-year government bond index rose 8.4%. Small capitalization stocks dropped in value, but not as much as expected based on their standard deviations. Meanwhile, large capitalization stocks performed worse than expected. A simple 50% S&P 500 and 50% Lehman Brothers Government Bond Index split would have lost just 12.5%.

Over the long run, Modern Portfolio Theory helps spread risk and build wealth. Nevertheless, the theory is not without critics. A chief complaint is that Markowitz's model assumes that asset returns are normally distributed. Frequently, however, stock market returns are not normally distributed. There can be large swings of three to six standard deviations from the mean that occur more frequently than they would if the returns were normally distributed. Other research shows that the Capital Asset Pricing Model cannot always be explained by a portfolio's beta value. Low beta stocks sometimes deliver higher returns than high beta stocks.

Markowitz disagrees. He says he does not assume that the probability distribution is normal. His research shows that mean variance portfolio relationships are a good approximation of the expected value of a portfolio.

"It is not true that I ever assumed probability distributions are normally distributed," he said. "It is another myth that you can't invest in assets (using Modern Portfolio Theory) that are not normally distributed."

For example, he stressed that derivatives, such as stock options, might be optimized in a portfolio to improve risk-adjusted rates of return as long as there is good data on the covariance relationships to other portfolio assets.

It is better to diversify across asset classes as well as within asset classes, he says. Diversifying between asset class portfolios as well as within portfolios is more "efficient" than doing only one of these, or neither. For example, riskier portfolios may contain greater weightings in emerging market and small company stocks, based on investment style. Less risky portfolios might be weighted more toward large capitalization US and foreign stocks, based on investment style, as well as short-term and intermediate-term bonds.

He emphasizes that the shorter the investment horizon, the greater the risk of losses because there is fatter tail risk. But the longer you hold asset classes, the greater the probability the distribution is normal. As a result, two-thirds of the time, returns typically fall between about -10% and +30%.

Markowitz is wary about adding alternative assets, such as private placements, commodities or exchange traded funds, to portfolios. Those assets, he believes, must be properly valued and thus, are best left to people like Warren Buffett and David Swenson of Yale University's endowment fund.

He also won't rely too much on Monte Carlo simulations that show the probabilities of how long someone's money will last. Monte Carlo simulations can scare the general public because investors can see that one out of 20 times, their money might not last as long as they do. On the plus side, however, the simulations often inspire 401(k) defined contribution plan participants to save more for retirement.

Markowitz cautions against "model risk." If you are using a specific type of investment model that makes decisions about how to invest, based on fundamental, economic and/or technical data, the model may ignore or downplay the possibility of large losses that have a one out of 20 or one out of 40 chance of occurring, he said.

It's also important, he said, to properly allocate assets. Investors must identify their risk exposure, based on five dimensions that include the time horizon, liquidity needs, net income, net worth, investing knowledge and attitude toward risk.

"At any point in time, we look back at the past, and make our estimates and decisions for the future," Markowitz said. "The future is always uncertain. We should make our best estimates for 'the next spin of the wheel,' and then choose an appropriate point from the implied risk-return trade-off curve.

"Depending on our risk capacity, perhaps we will select a more cautious portfolio, loaded with lower beta securities or asset classes; or conversely, we will choose a point higher on the frontier, with higher yield, but with higher beta securities or asset classes.

"If the market goes up dramatically, those with high beta portfolios will be happy; if it goes down, they will be sad. You pays your money and you takes your choice!" $

Alan Lavine is a columnist for Dow Jones MarketWatch's Retirement Weekly *publication. He is also a contributing editor with* Financial Advisor *magazine and* Registered Rep *magazine. He is the author of 15 books including the bestseller,* Rags to Riches: Motivating Stories of How Ordinary People Achieve Extraordinary Wealth *(iUniverse and Dearborn), which was featured on Oprah.* Diversify Your Way to Wealth *(McGraw-Hill), co-authored with Gerald Perritt, Ph.D., was an alternate selection of the Fortune Book Club in 1990.*

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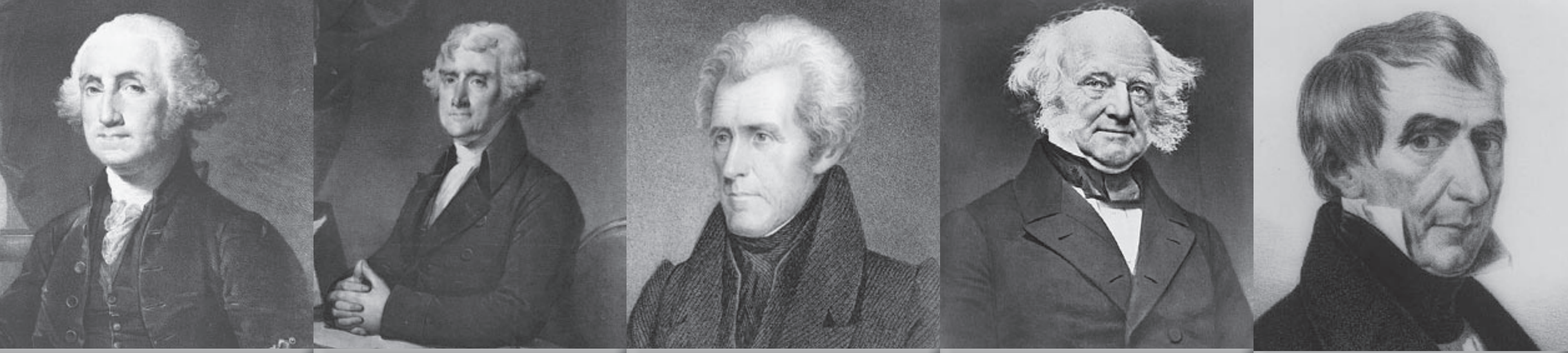


GEORGE WASHINGTON | THOMAS JEFFERSON | ANDREW JACKSON | MARTIN VAN BUREN | WILLIAM H HARRISON

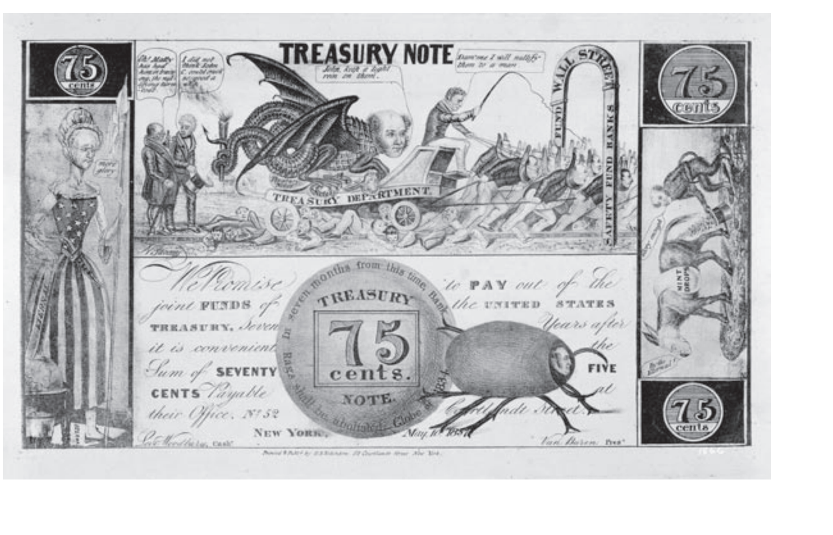
CHECKS &

BY ROBERT E. WRIGHT

"Today," President Bill Clinton (1993–2001) said on January 6, 1999, "I am proud to announce that we can say the era of big deficits is over."[1] Clinton's pronouncement was profoundly premature, a fact underscored by the debt ceiling impasse and Treasury bond downgrade of 2011. Unless the US economy improves faster than even the most optimistic economist now forecasts, huge federal deficits will be in America's future for many years to come. That means the national debt, already at almost $15 trillion and 100% of GDP, will continue to grow, putting more downward pressure on the government's bond rating and additional upward pressure on interest rates. Many Americans believe that more dangerously destabilizing political squabbles over taxes and social programs are forthcoming, with results that no one with a decent respect for the intricacies of politics and economics dares to predict.

How and why did Clinton's optimism turn so quickly to such despair? It is easy for Republicans to blame the policies of Barack Obama (2009–present) and for Democrats to blame those of George W. Bush (2001–2009) but the ultimate cause of the government's current fiscal predicament was the Great Depression (1929–1933, strictly speaking). That massive downturn, and the policies and economic theories it spawned, shattered the government's longstanding commitment to peacetime balanced budgets and thereby laid the foundations for its current budgetary woes.

The history of the US government's management of its budget can be divided into three great epochs, each of which is depicted graphically in the accompanying figures. During the first, the age of surpluses, which lasted from the administration of George Washington (1789–1797)



A parody of the often worthless fractional currencies issued by banks, businesses and municipalities in lieu of coin. These notes proliferated during the Panic of 1837 with the emergency suspension of specie (i.e., gold and silver) payments by New York banks on May 10, 1837. The artist broadly attacks President Van Buren's pursuit of predecessor Andrew Jackson's hard-money policies as the source of the crisis.

JOHN TYLER | JAMES BUCHANAN | GROVER CLEVELAND | WILLIAM McKINLEY | THEODORE ROOSEVELT

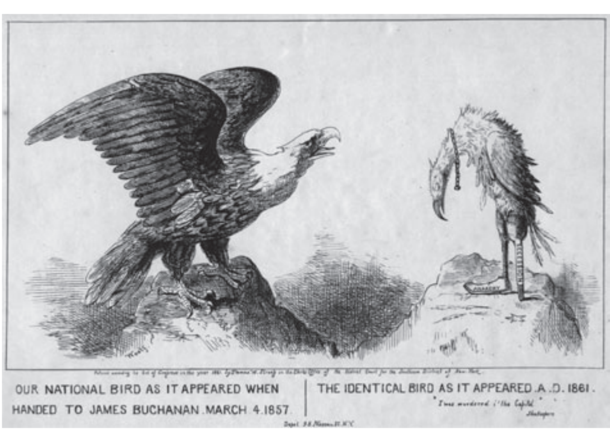
BALANCES

THREE EPOCHS OF FEDERAL BUDGET MANAGEMENT

through that of Calvin Coolidge (1923–1929), the federal government ran large deficits (>2% of GDP) only in wartime and paid down the resulting national debt by consistently running peacetime surpluses. During the second, the age of transition, which began during the administration of Herbert Hoover (1929–1933) and lasted through that of Richard Nixon (1969–1974), large deficits were tolerated during recessions or, under the influence of British economist John Maynard Keynes (1883–1946) and his followers, were encouraged in the name of macroeconomic stabilization. The ostensible goal of those administrations was to balance the budget across the business cycle rather than across the war-peace cycle. During the third epoch, the age of deficits, which began during the administration of Gerald Ford (1974–1977), deficit finance became a structural part of the US economy. To justify persistent, large deficits politicians began to point to the costs of fighting minor wars, establishing or maintaining social justice and stimulating economic growth.

The US government ran consistent peacetime surpluses during its first 140 years because everybody wanted it to. Even Alexander Hamilton, perhaps the most pro-debt policymaker of the first epoch, argued that a national debt was a blessing only if it was not "excessive." Presidents virulently opposed to peacetime deficits, including Thomas Jefferson (1801–1809) and Andrew Jackson (1829–1837), did everything in their power to run surpluses and were generally successful at doing so. Thanks to a string of post-War of 1812 surpluses interrupted by only three years of small deficits, Jackson was able to retire the national debt entirely at the end of 1834.

The largest peacetime deficit in real or percent of GDP terms in the first epoch took place in 1837, the first year of Martin Van Buren's presidency (1837–1841). It registered only .80% of GDP and was caused in large part by a 50% reduction in federal revenues following a financial panic and economic contraction. Nevertheless, it cost Van Buren considerable political clout. Two subsequent deficits, in 1838 and 1840, also hurt Van Buren, who found his fiscal policy difficulties excoriated in political cartoons and commentaries. Virginia politician William C. Rives (1793–1868), for example, asked a correspondent if there ever existed "a cooler piece of hypocrisy" than a Van Buren speech preaching "economy, in the face of the most lavish expenditure of the public Treasure by



Political cartoon criticizing James Buchanan, whose administration ran deficits in three years including the largest nominal peacetime deficit prior to 1894.

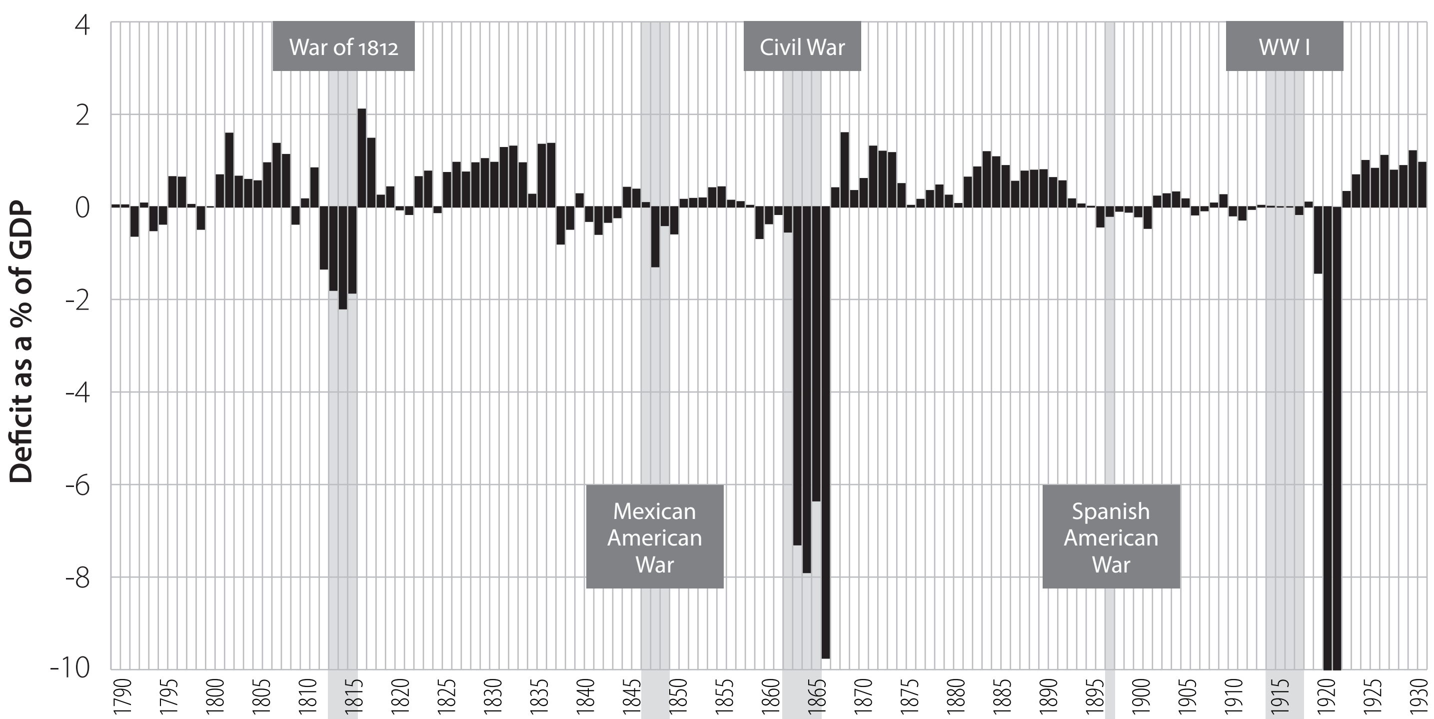
WILLIAM TAFT | WOODROW WILSON | HERBERT HOOVER | FRANKLIN ROOSEVELT | HARRY TRUMAN

himself—to deprecate and denounce a *public debt*, when he is the only President who ever *created* one, in time of peace."[2] Nicknamed the "Little Magician" and the "Red Fox of Kinderhook" (New York, his hometown) in recognition of his considerable political prowess, Van Buren was neither sly nor magical enough to overcome the political burden of having resurrected the national debt. Although he managed to receive almost 47% of the popular vote in 1840, Van Buren handily lost to William Henry Harrison (1841) in the electoral college, 234 to 60.

After Harrison died just a month into his term, his successor John Tyler (1841–1845) also ran three small deficits and also paid for it politically, though "His Accidency," as Tyler was dubbed, probably would not have won re-election even if his administration had run surpluses. Another despised one-term President, James Buchanan (1857–1861), also ran deficits in three years, including, in 1858, the largest nominal peacetime deficit ($27.5 million) prior to 1894. The Panic of 1857 was mostly to blame for the large shortfall because federal revenues fell from $74 million in 1856 to just $46.7 million in 1858. More controversially, Buchanan increased expenditures from $69.6 to $74.2 million over the same span. Like Tyler, however, Buchanan's relative fiscal profligacy played only a small role in his ouster.

After the Civil War, the federal government ran surpluses for almost three consecutive decades, even during economic downturns. By the early 1890s, however, the surpluses had shrunk from generally robust ones in the double and triple digits to just a few million dollars. When revenues collapsed in the wake of a financial panic, from $385.8 million in 1893 to $306.3 million in 1894, a fairly sizeable deficit of .43% of GDP occurred despite a simultaneous retrenchment in government expenditures of some $16 million. Deficits continued to dog the second administration of Grover

EPOCH I THE AGE OF SURPLUSES



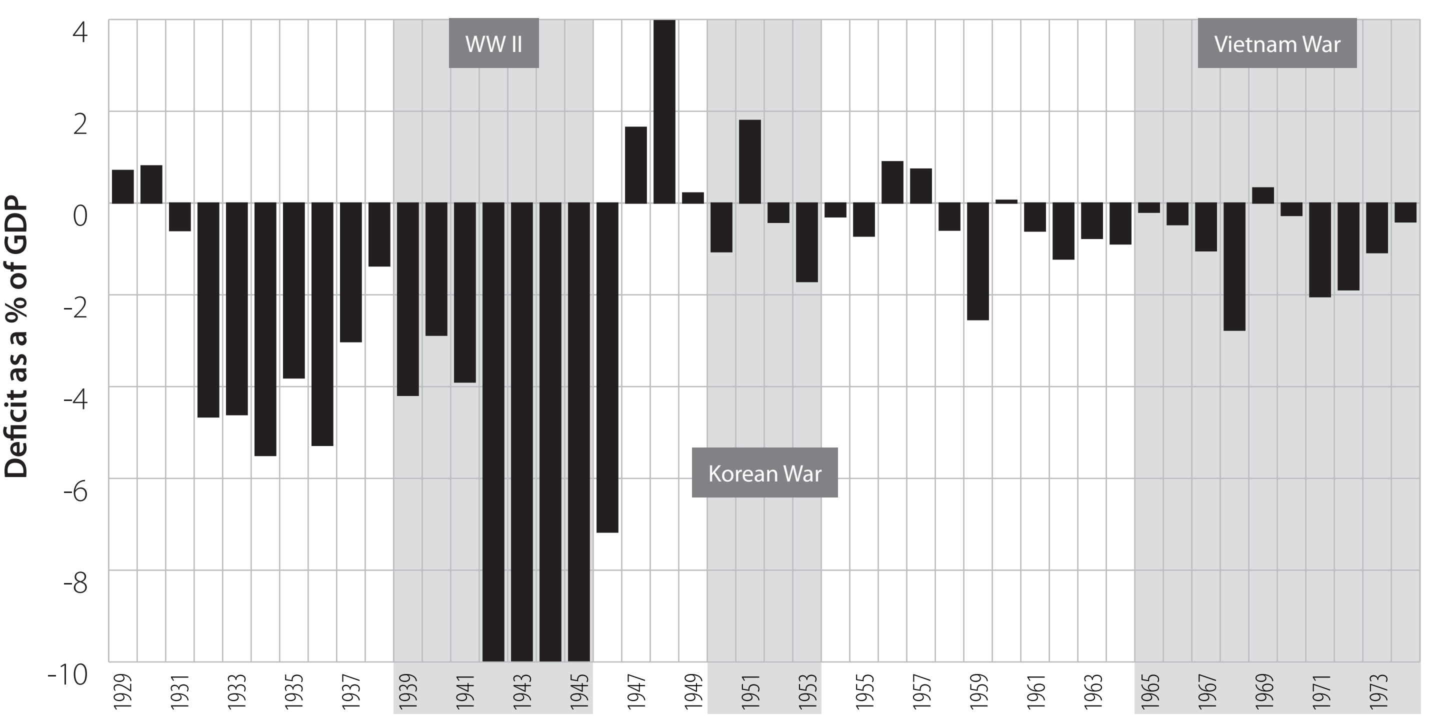
DWIGHT EISENHOWER | JOHN KENNEDY | LYNDON JOHNSON | RICHARD NIXON | GERALD FORD

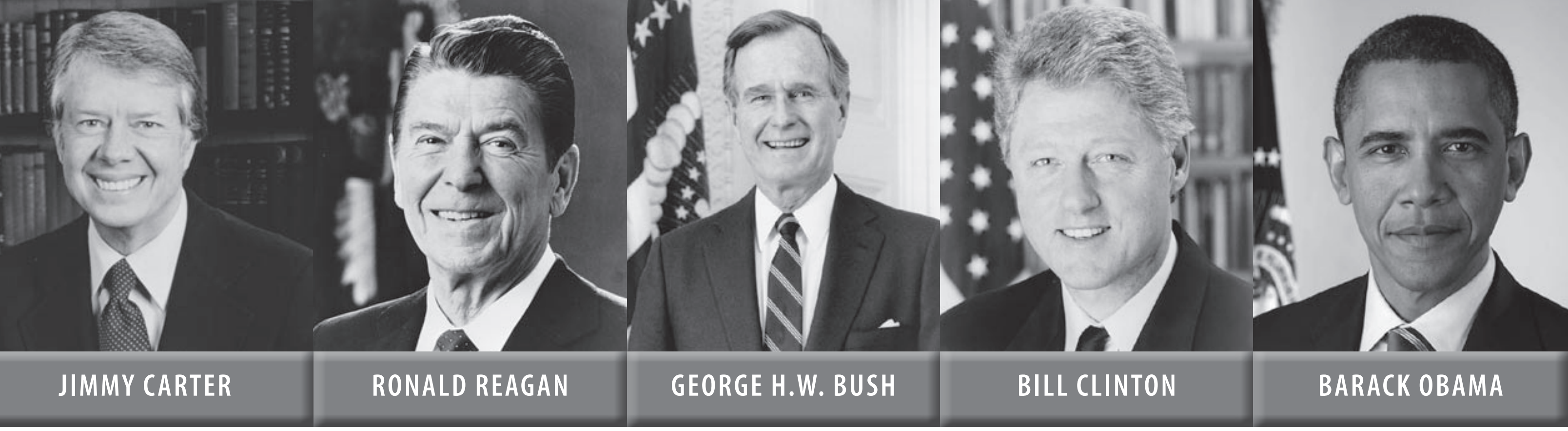
Cleveland (1885–1889; 1893–1897) and the first three years of the presidency of his successor, William McKinley (1897–1901). Tellingly, however, McKinley ran a surplus heading into the 1900 election, which he won, only to be assassinated the following year.

With the national debt almost extinguished in real terms, dropping under 5% of GDP in 1902, Presidents Theodore Roosevelt (1901–1909), William Taft (1909–1913) and Woodrow Wilson (1913–1921) found it politically expedient to run a few, small peacetime deficits. The national debt grew slightly in nominal terms during their presidencies, but continued economic growth meant that by 1916, the last full year before US military involvement in World War I, it stood at a mere 2.47% of GDP, its lowest level since the Civil War. The government ran a large deficit in 1919 due to engagements entered into before the war ended in November 1918, but true to form it enjoyed surpluses averaging .85% of GDP throughout the 1920s. By 1929 the national debt stood at only 16.34% of GDP and about $17 billion, down from 32.53% and $25.5 billion a decade earlier. Had the Great Depression not occurred, the US government would have continued running surpluses and paying down the debt until World War II.

The Depression did happen, however, and the nation has been paying for it ever since. The rhetoric of balanced budgets remained virulent for a long time. Both Herbert Hoover (1929–1933) and Franklin Roosevelt (1933–1945) repeatedly stated that in peacetime the government should at least balance the budget if not run surpluses. But the reality was different. After running surpluses in 1929 and 1930, the Hoover administration ran slightly into the red in 1931 at .6% of GDP, a common occurrence during recessions as described above. In 1932, however, Hoover busted all previous records with a peacetime deficit of $2.7 billion or 4.66% of a rapidly

EPOCH II THE AGE OF TRANSITION



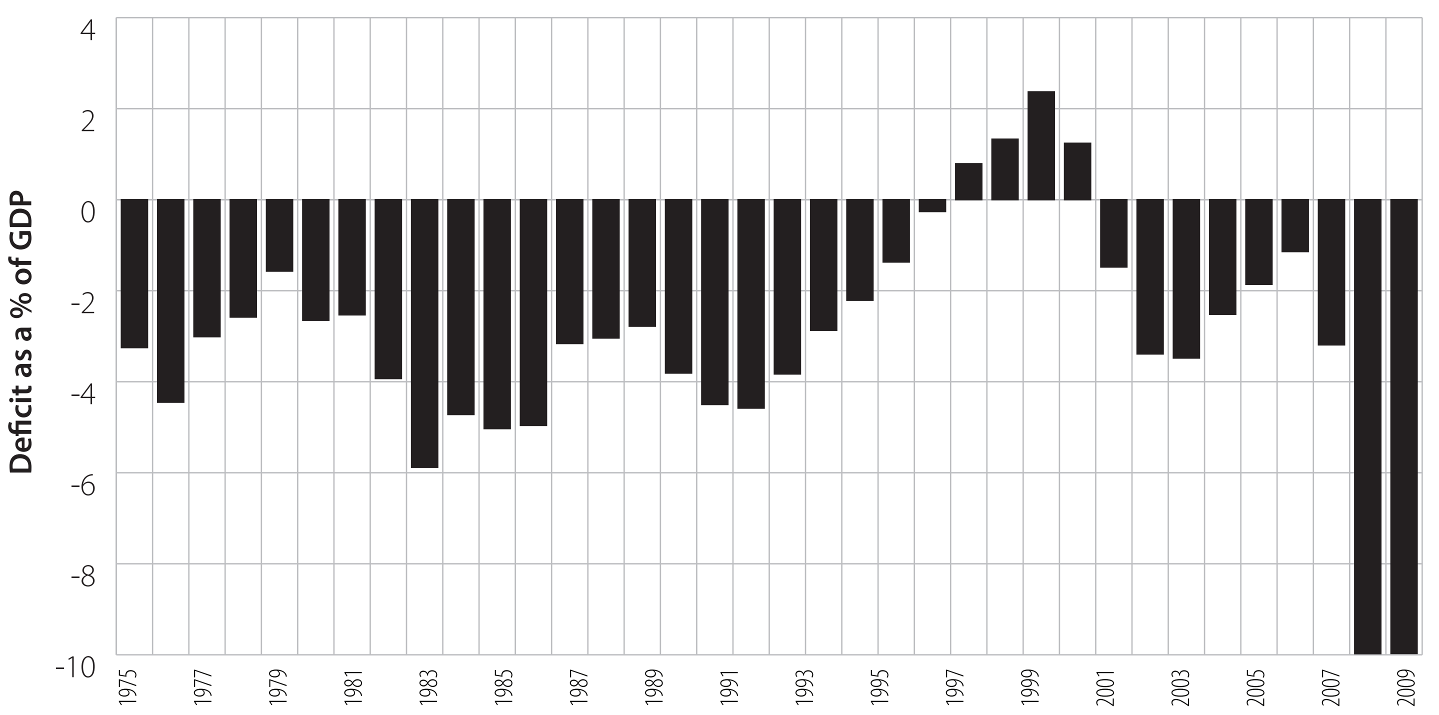


shrinking GDP. A precipitous drop in revenues from $3.1 to $1.9 billion was the primary culprit, but Hoover in his final year also increased government spending from $3.6 to almost $4.7 billion. Roosevelt ran deficits every year of his presidency, an average of 3.84% of GDP through 1941. By then, federal revenues had rebounded to $8.7 billion but expenditures grew even more quickly, to $13.6 billion, partly due to New Deal programs and partly due to military mobilization.

After the war, the US national debt stood at an unprecedented 122% of GDP. After demobilization was complete in 1946, Harry Truman (1945–1953) ran several surpluses, including an impressive $11.8 billion (4.38% of GDP) one in 1948. Thereafter, however, surpluses became smaller and less frequent. Wars in Korea and Vietnam, other foreign policy obligations, the space race, and the continued growth of New Deal and New Society entitlement programs stymied all attempts to balance the budget. Dwight Eisenhower (1953–1961) managed it only three years, and the last time only barely. The administrations of John F. Kennedy (1961–1963) and Lyndon Johnson (1963–1969) were in deficit every year, though only once, in 1968, at more than 2% of GDP. Richard Nixon (1969–1974) managed only one small surplus, in 1969, but two years later put the government in the red by over 2% of GDP.

But the track record of the Presidents during the second epoch was downright fiscally conservative compared to that of the Presidents since Nixon. In only one year during the administrations of Gerald Ford (1974–1977), Jimmy Carter (1977–1981), Ronald Reagan (1981–1989) and George H. W. Bush (1989–1993) was the deficit less than 2% of GDP. Reagan ran the two biggest in real terms, in 1983 and 1985. During his first term in office, Bill Clinton (1993–2001) and an increasingly buoyant economy sliced the deficit from 3.83% of GDP to just .26%. In his second term, the government ran the only surpluses of the third epoch. Deficits returned during both of » *continued on page 36*

EPOCH III THE AGE OF DEFICITS



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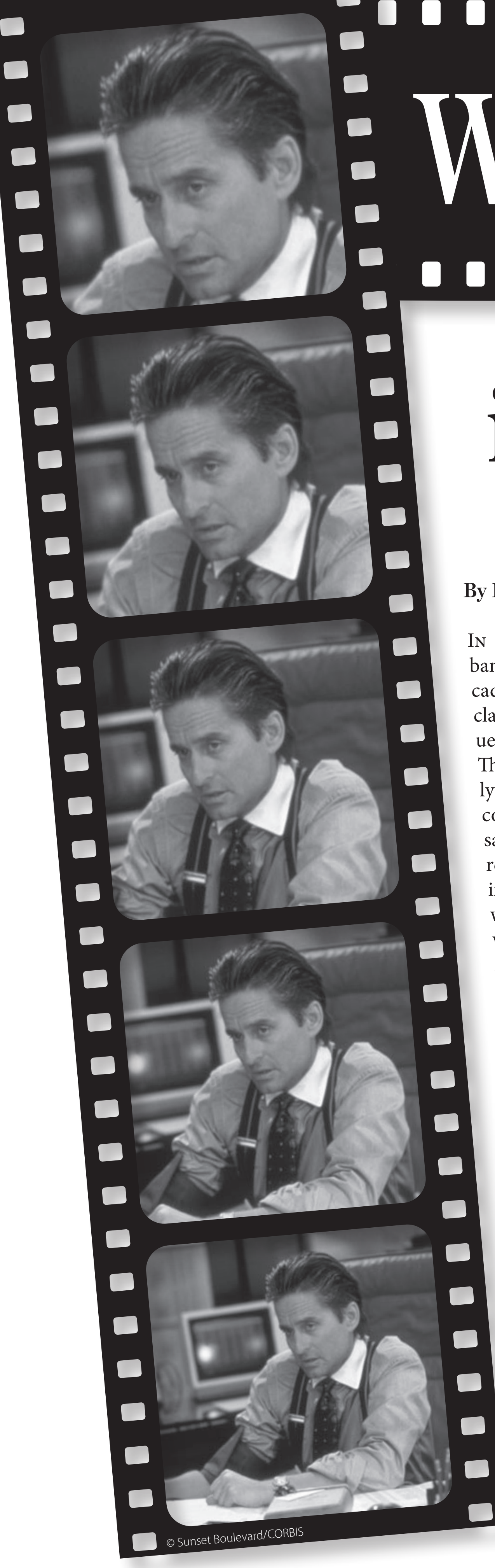
WALL STREET in WIDESCREEN



© Sunset Boulevard/CORBIS

By Hal Thompson

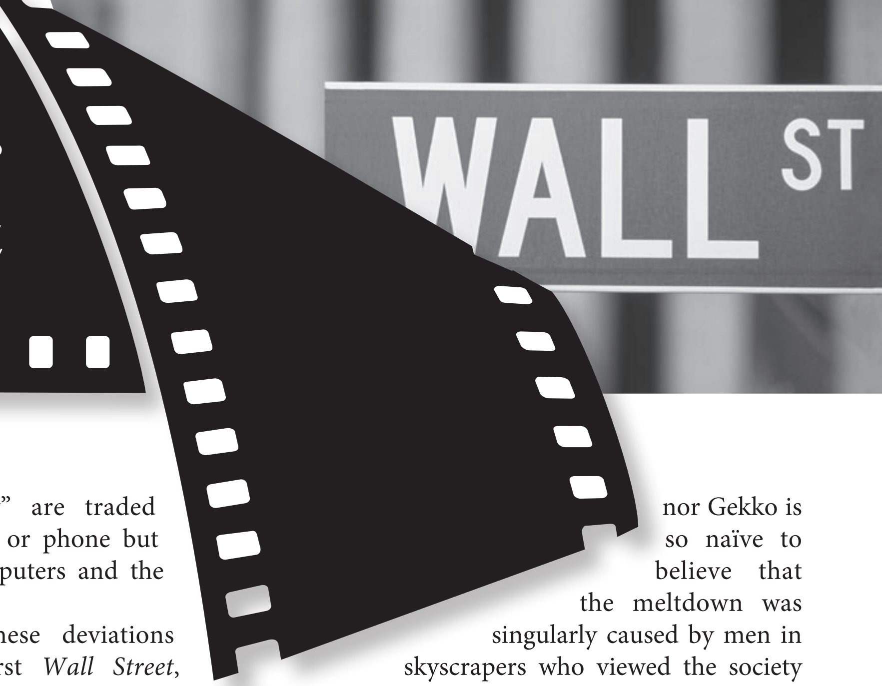
In the fall of 2008, as investment banks exploded and their debris cascaded upon the middle and lower classes, many Wall Street CEOs continued receiving bonuses worth millions. The Financial Crisis of 2008 fit Hollywood's formula for profit—power, corruption and lies equal ticket sales—so the recent spate of crisis-related films is not surprising. It is important to analyze the most noteworthy of the new films because they will, undoubtedly, become historical references in their own right in years to come as they help to define the Financial Crisis of 2008 for millions of moviegoers.

Perhaps the most well-known film about the modern US financial sector is Oliver Stone's *Wall Street* (1987). In this film, the up-and-coming, starry-eyed Bud Fox (Charlie Sheen) takes a whirlwind journey through the world of Wall Street under the tutelage of Gordon Gekko (Michael Douglas)—one of the legendary "players" Fox so desperately emulates. Unfortunately, Gekko's teaching methods are less than admirable, or legal, and early in their relationship Fox is performing insider trading deals in the hope of impressing Gekko. Douglas' infamous depiction of a stock market tycoon did more than just win the actor an Oscar. It also colored public perception of the kinds of people who appeared to run the nation's economy. Gekko's total disregard for the working class is made undeniably obvious by his final betrayal of Fox when he promises to expand the company, Bluestar Airlines (for which Fox's father works), but instead decides to gut it for a profit. Gekko's lack of compassion foreshadowed the climate on Wall Street in the years leading up to the Crisis of '08.

While Gekko is in no way a heroic figure in *Wall Street*, it would be an oversimplification to call him evil. The real genius of Stone's writing and Douglas' performance is that they make Gekko a more complex character than his stock-playing competitors. Near the end of the film, Gekko directs Fox's attention to a painting on his office wall and states, "The illusion has become real." The painting, bought at a bargain price, is now worth 10 times as much. In other words, things attain value when they are believed to have value. Gekko understands that it is not money that generates power but faith in that money. Unlike his colleagues, Gekko sees through the economic system, exploiting the Wall Street illusion and commenting on it at the same time.

Yet *Wall Street*, for all its financial rhetoric and character development, is still a film and as such is confined to an extremely short span of time. As a result, the film's conclusion suffers in its effort to tie up the loose ends. Gekko's startlingly poignant speeches on greed and money

The Financial Crisis of ’08 in Cinema



are forgotten so that he may fill the role of the “bad guy” who is served justice in the finale. Stone, too, must have realized this shortcoming and decided that Gekko could still teach the American people a thing or two about the wonders of Wall Street.

Wall Street: Money Never Sleeps (2010), the sequel to Stone’s classic, is set in the weeks just prior to the financial meltdown of 2008. It has been seven years since Gekko was incarcerated for insider trading and securities fraud. As in the original, this film focuses mainly on the rise and fall of another Wall Street aspirant, Jacob Moore (Shia LeBouf), who happens to be engaged to Gekko’s daughter. Unlike the first *Wall Street*, though, *Money Never Sleeps* requires Gekko to share the spotlight when it comes to filling the role of the informed Wall Street player. This time around there is also Jacob’s boss, Louis Zabel (Frank Langella), and his nemesis Bretton James (Josh Brolin). In the days before the start of the meltdown, Zabel and James represent two kinds of Wall Street high-rollers — one regrets what he has done and the other hopes to benefit from the inevitable crash. However, just as Gekko was a figure of ambiguous morals, these two men are not merely “good” and “evil,” aiding Stone’s effort to show the differing views regarding the financial collapse. Another difference between the films is in Stone’s use of cinematography. *Wall Street* was filmed using basic techniques that allowed the audience’s focus to remain on the actors. In *Money Never Sleeps* there are instances where Stone splits the action into two or more screens in a visual representation of how complex and overreaching the actions and outcomes of the stock market have become. Stone incorporates computer-generated scenes exclusively in the sequel, as a means of depicting how information and “money” are traded not by hand or phone but through computers and the Internet.

Despite these deviations from the first *Wall Street*, *Money Never Sleeps* relies solely on the interactions of its characters to explain the financial aspect of its story. In fact, Wall Street is momentarily forgotten in scenes when Moore, Gekko and Winnie (Gekko’s estranged daughter) linger on topics steeped in sentimentality. Still, the script remains faithful to the movie’s title and money is never disregarded for long. An easily overlooked example is in Moore’s first conversation with his mother, a real estate broker who has bought her way into debt. Moore expresses disappointment because his mother’s former profession as a nurse focused on helping people rather than pursuing them for their money. Further, Moore’s mother reflects the change in American society from the time when the first *Wall Street* was made to today; today people rationalize behavior that was once considered “greedy” by most Americans.

Of interest is that for much of *Money Never Sleeps* Douglas’ character is not in attendance physically, but his presence lurks in the shadows inside Wall Street’s boardrooms. Stone seems to have saved much of Gekko for the film’s final act where he comes roaring back to life delivering perhaps the most valuable nugget of wisdom in both movies: “It’s not about the money. It’s about the game.” As in the original *Wall Street*, Stone uses Gekko as the vehicle to carry the main point of his film from the screen to the audience in *Money Never Sleeps*. Obviously the Crisis of ’08 is more complicated than Gekko’s statement, but the magic of cinema is in its ability to simplify an idea or event into a one-liner or a single image. Neither Stone nor Gekko is so naïve to believe that the meltdown was singularly caused by men in skyscrapers who viewed the society below as their playground, but at the same time no one would want to listen, even to Gordon Gekko, if he launched into a 10-minute soliloquy on free-market capitalism when finally confronted about his motivations.

While simplification can sometimes add to a film, there are times when a director should allot more screen time to explanation. The biggest problem with *Money Never Sleeps* is the same as in *Wall Street* — its conclusion. After several instances of deception and betrayal by all three of the main characters, Stone ends his film on an uplifting note. If most viewers were not living with the long-term repercussions represented in the film, one would think that the consequences of the ’08 crisis had already been overcome.

Both *Wall Street* and *Wall Street: Money Never Sleeps* are ambitious films that grapple with issues that most Americans find more confusing than interesting. Yet for all their flaws, they present the world of speculative finance in a dramatic and well-informed manner. The triumph of Bud Fox and Jacob Moore, and their ability to escape corruption, are elements limited to the silver screen; it is the cinematic license given to Stone and all film directors who wish to tell true stories using fictional characters. The financial crisis itself is simply too large to fit into a two-hour timeframe. It must therefore be scaled down and dealt with on a personal level.

Drama is not the only genre of film. There is another type of film that specializes in simplifying and explaining actual incidents: the documentary. Perhaps the clearest difference between drama and

documentary is their use of emotion to convey a message. Typically, drama has the advantage of allowing the audience to experience its characters' lives. Documentary, on the other hand, usually has to rely on the testimony of people after the event has already happened. This difference can be a benefit for documentaries when dealing with overarching disasters like the Crisis of '08. In 2010, journalist Edwin Lane of the BBC argued, "For American film-makers, the scars of the recession may still be too raw to touch."

The 2009 *Frontline* documentary *Inside the Meltdown* points to the fall of the investment bank Bear Stearns in the spring of 2008 as one of the first major indicators of trouble on the financial horizon. *Frontline* states that, fearing the effects of systemic risk, Secretary of the Treasury Henry Paulson and Chairman of the Federal Reserve Ben Bernanke ordered an emergency loan to Bear Stearns in order to save it. The loan only delayed the inevitable; shortly after Bear Stearns was sold to JP Morgan for pocket change.

Frontline spends considerable time on the Bear Stearns crisis because of how it appears to have affected decisions made in the months to follow. Some have speculated that because Paulson and Bernanke chose to save Bear Stearns, Lehman Brothers — the next investment bank to implode — decided not to seek a buyer for its declining stock, believing that the federal government would come to its rescue. *Frontline* places the final decision to let Lehman fail on Paulson, with the possible motivation being a personal grudge against its CEO, Richard Fuld, Jr. Regardless, *Frontline* concludes that the loss of Lehman Brothers resulted in unchecked systemic risk, ultimately leading to the freezing of credit markets and an outbreak of fear and panic on Wall Street.

While *Inside the Meltdown* may not have the emotional depth of Oliver Stone's *Money Never Sleeps*, it tells its story with gravitas through the lens of personal narrative, in this case Henry Paulson. Another way for a documentary to make up for its lack of voyeuristic emotion is in the images it displays while voices talk off-screen. *Inside the Meltdown* portrays Paulson in stark black-and-white stills. This technique allows the audience to participate in a kind of character study of Paulson. He is never directly blamed for the financial meltdown, but the documentary depicts him as having played a key role in the disaster. Just as in Stone's dramas, *Frontline* chooses to explain the collapse not by using only numbers or financial jargon, but by highlighting the human decisions that led to the crisis.

Another documentary, *Inside Job* (2010), directed by Charles Ferguson, describes how the US financial sector ran itself, and the entire economy, into the ground. *Inside Job*, in contrast to *Inside the Meltdown*, blames deregulation, especially of the derivatives market, for the crisis because derivatives were the means by which investment banks took risks large enough to destabilize the entire international financial system. Ferguson also devotes parts of his film to areas affected by Wall Street that are not as well known. For example, *Inside Job* holds interviews with top economists who have connections to investment banks' boards or research departments, revealing that even scholars were co-opted by Wall Street.

Ferguson's *Inside Job* is engaging not only for its informative depiction and explanation of the meltdown, but also for its masterful use of documentary as a film style. Throughout the film, the audience is repeatedly informed that various people refused to be interviewed. Essentially, Ferguson allows the absentees to damn themselves by not making themselves available to defend their position after the film has called them out on their mistakes. Whether law or counsel mandated their silence, "declining to comment" gives the appearance of guilt. But granting Ferguson an interview clearly did not mean that one's innocence would be assured. Ferguson's off-screen reactions to those on-screen give the audience the impression they are feigning ignorance, giving their confused responses a sinister undertone. However, the outrage behind *Inside Job* is not spelled out until the audience is directly addressed in the last few minutes. Ferguson's film ends with a plea to the average American: because the government refuses to act, it is up to the people to improve the flawed financial system.

While cinema may not be the first thing associated with American finance or Wall Street, it carries with it a trait that, according to *The Deal*'s Editor-in-Chief Robert Teitelman, is uncannily similar. Films are "made to make money, which is something they share with Wall Street." Stone and Ferguson likely benefitted from making their films when they did, not only because the films' material was still a topic of interest among the public, but also because they offered viewers the rare chance to examine the films' accuracy since the story they dealt with was still being played out.

In fact, two films about the '08 crisis were released at this year's Sundance Film Festival: *Margin Call* (2011), a drama starring Kevin Spacey, and *The Flaw* (2011), a documentary featuring Nobel Prize-winner Joseph Stiglitz. Clearly, Hollywood has only begun to scratch the surface of the story of the financial collapse. And while *Margin Call* and *The Flaw* have yet to be released, HBO is currently featuring a 90-minute film adaptation of the nearly 600-page bestseller, *Too Big to Fail*, by Andrew Ross Sorkin. The film has already sparked numerous wide-ranging reactions on HBO's website, from those who discount the portrayal of blame to many more recommending the film to friends and colleagues. *Too Big to Fail* falls between drama and documentary, relying on frequent news clips and sound bites from CNBC to remind the viewer of the reality of the events being portrayed on screen.

Film is an important medium through which the public learns about past and current financial events, and there is no indication that this trend will stop, especially with the Financial Crisis of '08 still looming large. The appeal of cinema has always been in its ability to transfer information to the masses. And while movies may not always be the most accurate in their portrayal of events, moviegoers do not attend films like *Money Never Sleeps* for their attention to detail but for their general, big picture messages. Films made now about the Crisis of '08 and its repercussions will shape the public's understanding of what went wrong and will be invaluable in trying to prevent the same mistakes from happening again. $

Hal Thompson is a junior at Augustana College in Sioux Falls, SD, and the recipient of the 2011 Thomas Willing Institute fellowship.

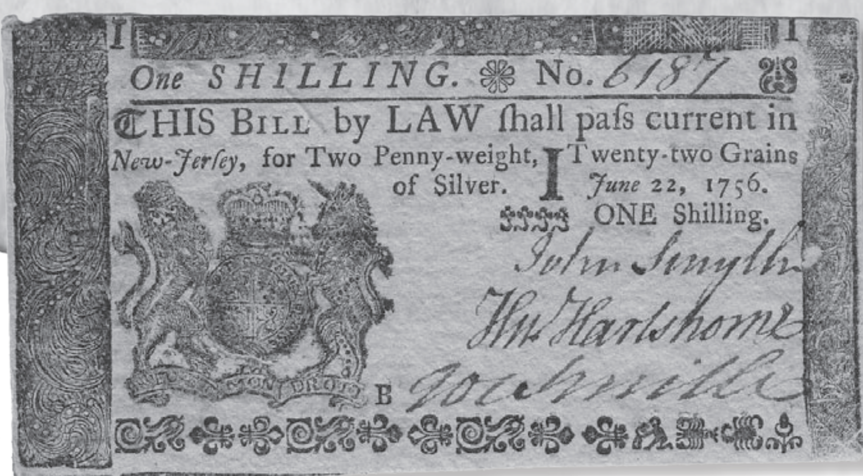
SANFORD J. MOCK
TRIBUTE ARTICLE

This series of articles on 18th century American finance is dedicated to the memory of Sanford "Sandy" Mock. A long-time collector of historical financial documents, Sandy contributed several articles to *Financial History* magazine and donated a large portion of his 18th century collection to the Museum's archives. Sandy's spirit of the adventure of collecting, his eager cooperation with many others in their research, and his generosity on behalf of those who love the history of finance will always be with us.

COLONIAL ANTECEDENTS

The Financial Sector of the New Nation

By Edwin J. Perkins



Museum of American Finance

One shilling in New Jersey paper currency, dated June 22, 1756.

The financial sector of colonial North America in 1765 differed in numerous ways from that of the newly-independent United States of 1795, but the two financial landscapes also had many commonalities. By the mid-1790s, the new nation had a safe and sound financial sector. It possessed a consolidated national debt that investors welcomed and trusted. The new nation also had a monetary system with two strong components: circulating silver and gold coins (mostly Spanish in origin) plus paper currency issued by the federally-chartered Bank of the United States and backed by gold bars stored inside its vaults as reserves. But, contrary to what many believe, the colonial system of financial management in operation three decades earlier was equally safe and sound.

The 13 colonial legislatures in 1765 combined had little outstanding public debt. Indeed, most colonies had no formalized public indebtedness at all. New England was the exception; a modest capital market arose in the region after 1750. The legislatures in those northern colonies had the authority to borrow money directly from private investors through the issuance of formal debt obligations with two to five year maturities. These debt obligations

Museum of American Finance

Reverse side of one shilling New Jersey currency with the "nature print," an anti-counterfeiting measure devised by Benjamin Franklin.

were sold domestically to private parties, and most investors held them right up to the due date. The issuing legislatures had an outstanding record of prompt redemption. By the 1760s the credit worthiness of the New England colonies was well-established and widely respected.

Other colonial legislatures issued a circulating paper money, as an alternative to formal debt obligations, which was also highly valued in the domestic market. We can adduce the claim of widespread public acceptance by noting the currency's purchasing power with respect to contemporary gold and silver coins; the exchange rates between various paper currencies and hard monies were reasonably steady for most colonies prior to 1751, and universally after that date. Colonial paper monies were supported by the taxing power of their respective legislatures or, alternatively, by first mortgages on the real estate of private borrowers.

Past critics of colonial finance have frequently cited the absence of broad public access to development loans from alternative sources. Colonial capital markets were allegedly very inefficient. But that judgment is overdrawn; loans to private parties were frequently available locally from wealthy lenders, whether planters or merchants. Relatives and nearby neighbors were the favored loan recipients. Some lenders were motivated by the ageless ideal of noblesse oblige — a civic duty to provide assistance to persons desiring financial assistance in a locale with few sources of loanable funds. Recently married couples often needed extra funding to get off to a fast start. Neighbors hit by seasonal bad luck might have needed financial assistance to help get them over the hump.

Since most households in this asset-rich agricultural environment prospered on at least a moderate scale over the long run, the likelihood of multiple defaults on private loans was relatively low. In a parallel market, lawyers and other intermediaries frequently arranged loans among strangers with multiple endorsers. Most borrowers used the funds to purchase arable land, seeds for planting, construction materials, livestock or bonded labor (slaves and servants), and they eventually produced surpluses for sale in regional or international markets. Aspiring artisans and merchants bought tools and other materials. Most borrowers generated sufficient cash income to repay the outstanding loans.

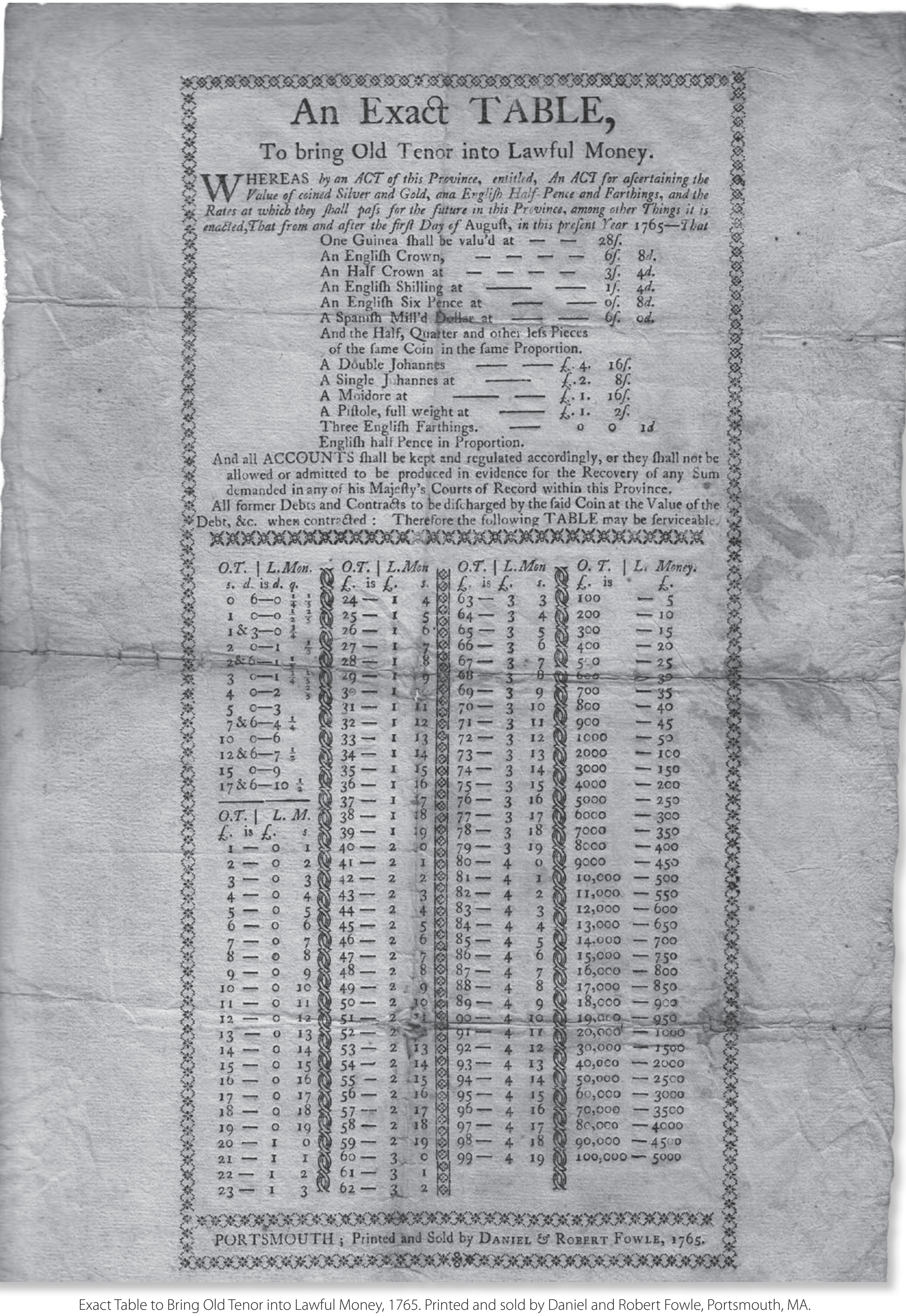
In every colony except Virginia, prospective borrowers periodically had the opportunity to obtain substantial investment funds from mortgage loan offices created by their respective legislatures. In this era, governmental loan offices were typically called land banks; the terminology arose because real estate was the singular collateral held to secure outstanding loans. These novel financial institutions had originated in Europe in prior centuries, but none had survived. In the colonies, however, the land bank system flourished.

Loan offices actually had a dual purpose. In addition to providing needed capital resources, they simultaneously injected circulating paper monies into the marketplace and thereby facilitated a wide range of exchange transactions among residents. Lending terms varied from colony to colony, but generally speaking the agricultural sector, which comprised over three-quarters of the economy, generated most of the eligible borrowers. Artisans and merchants who owned their own homes were also eligible to receive loans secured by urban properties. Interest rates were low — usually in the range of 5–8% — and reasonable, which we know because people lined up for them.

The size of any given loan was limited in two ways. First, absolute restrictions were placed on exactly how much money any household was allowed to borrow from the loan office. That rule was established to make certain that loans were widely distributed among the population. This first restriction guaranteed that no tight clique of wealthy families could gobble up a disproportionate share of the loanable pot. The second restriction kept the size of any loan to a figure no greater than one-half of the assessed value of the real estate offered as collateral. Loan maturities varied from three to 12 years, with regularly scheduled amortization payments over the course of the loan in most cases. (Incidentally, mortgage lenders and borrowers rediscovered the fully amortized loan methodology in the first half of the 20th century.) Principal repayments plus interest were invariably made with the paper currency remaining in circulation, and the incoming bills were often burned. In most colonies this system of paper money issuance, with the secure backing of mortgage documents, functioned exactly as planned.

Loan offices were created in some colonies as early as the 1720s. In the mid-Atlantic colonies, the newly-minted paper currencies handed over to borrowers at the initiation of the loan invariably maintained their purchasing power throughout the 18th century. The Pennsylvania legislature used the interest earnings from mortgage lending activities to cover most of its annual expenses for decades, thereby avoiding the necessity for even modest taxation. Other colonial legislatures welcomed the interest revenues as well. Overall, it was a win-win situation; borrowers gained access to investment capital and the government profited. Taxes were low compared to the rates prevailing in the home country.

Historians, unfortunately, often behave like many modern-day journalists. The ink devoted to writing about financial scandals over the past two centuries surely exceeds the amount used to describe financial success stories, past and present.



An Exact TABLE,

To bring Old Tenor into Lawful Money.

WHEREAS *by an ACT of this Province, entitled, An ACT for ascertaining the Value of coined Silver and Gold, ana English Half-Pence and Farthings, and the Rates at which they shall pass for the future in this Province, among other Things it is enacted, That from and after the first Day of* August, *in this present Year* 1765—*That*

One Guinea shall be valu'd at — —	28*s*.	
An English Crown, — — — —	6*s*.	8*d*.
An Half Crown at — — — —	3*s*.	4*d*.
An English Shilling at —— ——	1*s*.	4*d*.
An English Six Pence at —— ——	0*s*.	8*d*.
A Spanish Mill'd Dollar at —— ——	6*s*.	0*d*.

And the Half, Quarter and other less Pieces of the same Coin in the same Proportion.

A Double Johannes —— ——	£. 4.	16*s*.
A Single Johannes at ——	£. 2.	8*s*.
A Moidore at —— ——	£. 1.	16*s*.
A Pistole, full weight at ——	£. 1.	2*s*.
Three English Farthings. ——	0 0	1*d*

English half Pence in Proportion.

And all ACCOUNTS shall be kept and regulated accordingly, or they shall not be allowed or admitted to be produced in evidence for the Recovery of any Sum demanded in any of his Majesty's Courts of Record within this Province.

All former Debts and Contracts to be discharged by the said Coin at the Value of the Debt, &c. when contracted: Therefore the following TABLE may be serviceable.

O.T.	*L.Mon.*	*O.T.*	*L.Mon*		*O.T.*	*L.Mon*		*O.T.*	*L. Money.*
s. d.	*is d. q.*	£.	is £.	*s.*	£.	is £.	*s.*	£.	is £.
0 6	0 $\frac{1}{4}$ $\frac{1}{5}$	24	1	4	63	3	3	100	5
1 0	0 $\frac{1}{2}$ $\frac{2}{5}$	25	1	5	64	3	4	200	10
1 & 3	0 $\frac{3}{4}$	26	1	6	65	3	5	300	15
2 0	1 $\frac{1}{5}$	27	1	7	66	3	6	400	20
2 & 6	1 $\frac{1}{4}$	28	1	8	67	3	7	500	25
3 0	1 $\frac{3}{4}$ $\frac{1}{5}$	29	1	9	68	3	8	600	30
4 0	2 $\frac{2}{5}$	30	1	[illegible]	69	3	9	700	35
5 0	3	31	1	11	70	3	10	800	40
7 & 6	4 $\frac{1}{4}$	32	1	12	71	3	11	900	45
10 0	6	33	1	13	72	3	12	1000	50
12 & 6	7 $\frac{1}{2}$	34	1	14	73	3	13	2000	100
15 0	9	35	1	15	74	3	14	3000	150
17 & 6	10 $\frac{1}{2}$	36	1	16	75	3	15	4000	200
		37	1	17	76	3	16	5000	250
O.T.	*L. M.*	38	1	18	77	3	17	6000	300
£.	is £. *s.*	39	1	19	78	3	18	7000	350
1	0 1	40	2	0	79	3	19	8000	400
2	0 2	41	2	1	80	4	0	9000	450
3	0 3	42	2	2	81	4	1	10,000	500
4	0 4	43	2	3	82	4	2	11,000	550
5	0 5	44	2	4	83	4	3	12,000	600
6	0 6	45	2	5	84	4	4	13,000	650
7	0 7	46	2	6	85	4	5	14,000	700
8	0 8	47	2	7	86	4	6	15,000	750
9	0 9	48	2	8	87	4	7	16,000	800
10	0 10	49	2	9	88	4	8	17,000	850
11	0 11	50	2	10	89	4	9	18,000	900
12	0 12	51	2	11	90	4	10	19,000	950
13	0 13	52	2	[illegible]	91	4	11	20,000	1000
14	0 14	53	2	13	92	4	12	30,000	1500
15	0 15	54	2	14	93	4	13	40,000	2000
16	0 16	55	2	15	94	4	14	50,000	2500
17	0 17	56	2	16	95	4	15	60,000	3000
18	0 18	57	2	17	96	4	16	70,000	3500
19	0 19	58	2	18	97	4	17	80,000	4000
20	1 0	59	2	19	98	4	18	90,000	4500
21	1 1	60	3	0	99	4	19	100,000	5000
22	1 2	61	3	1					
23	1 3	62	3	2					

PORTSMOUTH; Printed and Sold by DANIEL & ROBERT FOWLE, 1765.

Museum of American Finance

Exact Table to Bring Old Tenor into Lawful Money, 1765. Printed and sold by Daniel and Robert Fowle, Portsmouth, MA.

Coins of Spanish origin, such as this 1765 example worth eight Reales, were common in the American colonies.

The misunderstood history of the overall quality of colonial paper money is a prime example of these distortions.

During the 18th century, every colonial legislature issued paper currency to cover unanticipated expenses at one time or another. Most currency issues were prompted by the need for military expenditures. In the New England colonies and South Carolina the value of the outstanding paper currency eventually sank to nearly worthless levels. These colonial legislatures failed to impose sufficient taxes to sink the volume of currency outstanding. All that is undeniably true, and these events deserve historical coverage. However, the fact that similar issues of paper currencies in other colonies maintained their circulating value for decades is a parallel development rarely emphasized in the existing historical literature.

Since paper money schemes in contemporary Europe had invariably resulted in hyperinflation and eventual abandonment, the problems experienced in the northern colonies should have come as no surprise. The most important story, though largely ignored, was just the opposite — namely that, against all odds, seven colonies issued and then reissued paper currencies, which maintained purchasing power for decades. Parliamentary officials with responsibility for the oversight of the North American colonies persistently warned about the dangers inherent in the questionable issuance of paper money, but colonial leaders ignored the warnings, defied their superiors and forged ahead into dangerous territory.

In addition to the backing of private mortgages, many currency issues had public backing from the taxing power of local legislatures. The key to success in this financial realm was the restraint exhibited by publicly elected officials outside of the New England region. The successful legislatures did not engage in over-issuance; this prudence was a key a factor in allowing the paper currency to maintain its face value in financial markets. So while some colonial paper money experiments ultimately failed, the vast majority of the paper monies issued in the colonial era actually maintained par value over the long run.

Whereas events prior to 1775 have received much bad press, developments in the 1790s have been praised by financial historians — and justifiably so. The new nation boasted a strong financial services sector. Public finance was once again in sound condition — as it was 20 years earlier. Alexander Hamilton was the leading figure in this revival project. The overhanging wartime debts of the several states and the Continental Congress were consolidated, and interest payments on two-thirds of the outstanding principal were quickly resumed. The final third of the principal was scheduled for servicing soon after the turn of the century. A majority of investors were confident that the US government would live up to the terms of the contract in the years ahead. Again, we can adduce this fact based on market prices for these bonds, which typically traded at above par value. They were not only purchased by resident citizens, but by foreign investors as well.

By the 1790s the nation, once again, had a reliable source of paper money. The issuers were no longer legislative bodies but chartered commercial banks. The constitution had disallowed future issues of currency by state governments, and private banks stepped forward to fill the void. The main issuer of currency was the Bank of the United States, which held a federal charter. The original capitalization of $10 million was sufficient to serve most of the monetary requirements of the reemerging economy. Its note issue was backed by specie, and, indeed, its outstanding currency was immediately convertible at teller windows into gold or silver coin. Throughout the 20-year life of the Bank of the United States, its currency maintained face value in voluntary exchanges with coinage, and exchanges with various forms of foreign monies as well. Smaller banks with charters granted by state legislatures also issued paper monies, and they likewise held adequate reserves in gold and silver.

After 15 years of war-related financial disturbances, the new nation had regained its former balance. By 1795 the financial services sector had rebounded and returned to the efficiency and stability that had reigned throughout the last quarter century of the colonial era. **$**

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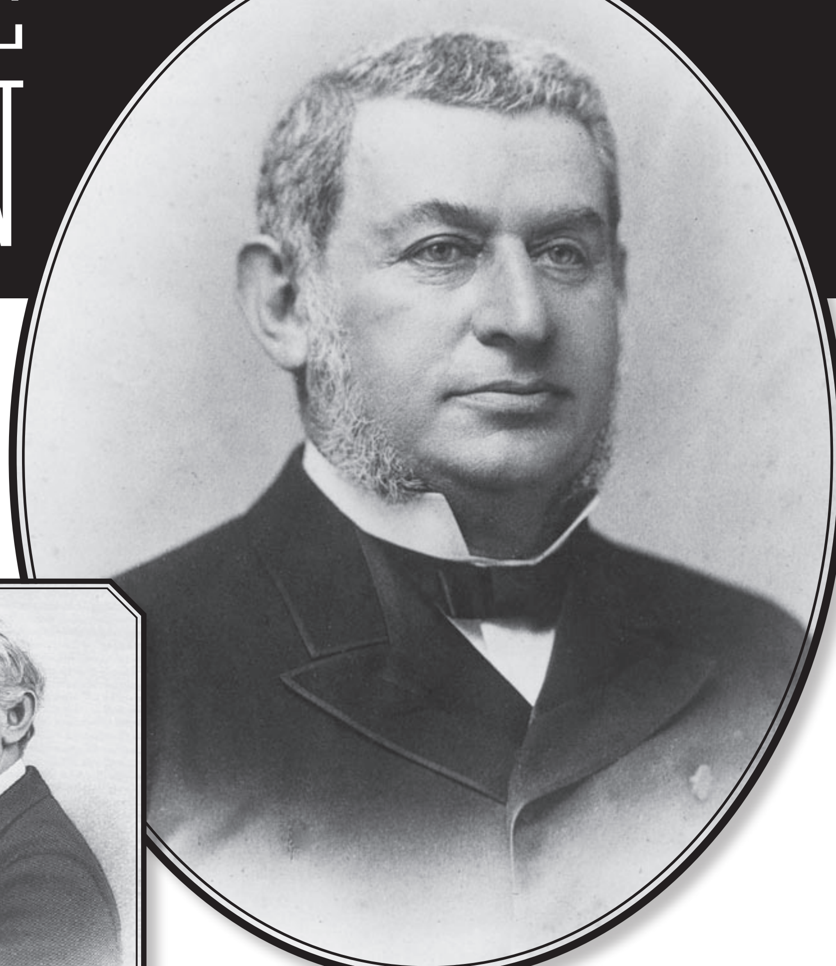
JOSEPH & JESSE SELIGMAN

Pioneers of 19th Century American Investment Banking

By James S. Kaplan

Joseph Seligman



Brown Brothers, Sterling, PA

Jesse Seligman

Although hardly known today, Joseph and Jesse Seligman were among the leading Jewish investment bankers of the mid-19th century. Having arrived in America early in the 19th century as penniless immigrants, by the late 1870s they were among the wealthiest and most prominent Jews in New York City, as members of the family firm of J.W. Seligman & Co. Ironically, just as they had reached the pinnacle of their prominence, they became highly-publicized targets of rising American anti-Semitism. Their story indicates both the opportunities and the problems faced by German Jewish immigrants on Wall Street in the 19th century.

Joseph Seligman was born in Baiersdorf, Germany in 1818, and his brother Jesse was born a few years later. Their father was a minor retail shopkeeper and woolen broker who had six children besides Joseph and Jesse. Southern Germany was at the time a difficult place for Jews to live, as they were restricted from most professions. While their father wanted his oldest son, Joseph, to stay in Baiersdorf to work in the family business, his mother encouraged him at the age of 14 to go to the University of Erlagen, a relatively unusual step for the son of a lower middle class Jewish merchant. However, the rural farmers who were Seligman's customers were beginning to migrate to Germany's cities, and the prospects in Baiersdorf were declining. Again with his mother's encouragement and $100 sewed in his jacket pocket, at the age of 17 he emigrated to America, landing in New York.

Joseph's arrival in New York could not have been better timed. The Erie Canal had been completed 10 years earlier and notwithstanding the Panic of 1837, New York and the Northeast were booming economically. A national market was beginning to develop for retail goods, and although not as numerous as later, Jews were well-established in New York and subject to comparatively little religious discrimination. At the time the only Jewish synagogue in New York was Congregation Shearith Israel, the Sephardic synagogue which was formed in 1654 and had strongly backed the patriot cause in the American Revolution. Its members were well-respected in the merchant community and fully integrated into the life of the city.

There were significant opportunities in America's growing economy for young men with a background in selling merchandise. Joseph Seligman migrated to what today is Jim Thorpe, PA, where he got a job running a store for Asa Packer, a well-known businessman and later Congressman. With Packer's support, he later struck out on his own as an itinerant

peddler in which he brought and sold goods to rural families in the Midwest.

Although carrying goods on horseback, and later wagon, throughout remote areas of the country may not have seemed the most appealing job, Seligman and later his brothers found it excellent training in both business and integration into the United States. First, in order to convince the customers (usually the women of the family) to buy his wares, he would have to learn to speak English fluently. Second, he would have to understand his gentile customers and their needs. And third, he would obtain a sense of the breadth of the country and its various regions. All of these would put him in good stead later in life when he was working closely with the US government and financing railroads.

After achieving some success as a peddler, Seligman brought over his brothers and later his whole family, including his father, from Germany. He established retail stores in Lancaster, PA, and then in Alabama after his brother, James, had success selling goods in the South. Later he established a store in Lower Manhattan at 5 William Street (later the headquarters of Lehman Brothers) and in Watertown, NY, where his brother, Jesse, became a good friend of a young Army officer named Ulysses S. Grant. After the California gold rush, Jesse was sent to San Francisco, where he established one of the city's most successful retail stores.

By the late 1850s the Seligmans were a well-established multi-store retail operation with a presence in a number of markets. In 1859, they were offered the opportunity to purchase a major clothing manufacturing plant in Brooklyn. This was a risky proposition, since the idea of purchasing ready to wear clothing was still in its infancy. However, when the Civil War broke out the following year, there was tremendous demand from the US Army for uniforms. The problem was that the US government was a notoriously slow payer, and for that reason many manufacturers did not want the business.

The Seligmans, however, had no such qualms. Perhaps because they were Jewish immigrants from Germany, for them there was no greater honor than to provide supplies to the US Army. Soon their factory was working triple shifts turning out uniforms. They thus developed close ties with the Lincoln administration and the Republican Party.

Joseph Seligman, who was a major creditor of the US government, even offered to try to help with the country's financial problems, which became increasingly severe after several Union defeats in the early part of the Civil War. Visiting contacts in Frankfurt, Germany, where his firm maintained a branch, he was credited with opening up a market for US securities in Europe at a time when the Union government desperately needed cash to finance the Civil War. Along with Jay Cooke, he became one of the leading financiers of the war effort and was instrumental in developing overseas investment banking. Meanwhile, his brothers were active supporters of President Lincoln and his brother, Jesse, was one of the founders of the Union League Club.

After the Civil War, the firm of J.W. Seligman & Co. (into which Joseph's business operations were consolidated) became one of the most active financiers of railroads, particularly in the Midwest and Southwest. After the Civil War J.W. Seligman & Co. was the most prominent Jewish firm on Wall Street — overshadowing Lehman Brothers, Goldman Sachs and Kuhn Loeb at the time. President Grant offered Joseph Seligman the position of Secretary of the Treasury in his administration, but he turned down the offer stating that the press of business precluded him from accepting it.

The Seligmans purchased large mansions on Fifth Avenue and became one of the most prominent German Jewish families in New York. They were active members of Temple Emmanuel, the most important of the temples of Ashkenazim German Jews who had broken off from Shearith Israel in 1825 (although religiously Joseph Seligman at the end of his life was veering toward Felix Adler's ethical culture). Their children were taught by private tutors such as the writer Horatio Alger, who for some time lived with Joseph Seligman and his family. It is believed that Seligman was the inspiration for a number of Alger's novels about young men coming from rags to riches in America.

Joseph Seligman also took an active role in civic affairs and engaged in a number of high profile patriotic endeavors that enhanced his reputation and that of his firm in the post Civil War era. He financed a trip to Europe by Mrs. Abraham Lincoln, who claimed to be penniless after the death of her husband, and promoted a successful effort for Congress to provide her with a pension. He also hosted at his Fifth Avenue mansion a dinner for President Grant and Confederate General Pierre Beauregard to show the reconciliation between the North and the South.

By the late 1870s the Seligmans were at the pinnacle of their lives both socially and professionally, and Joseph considered himself to be a prominent American citizen. However, a dispute between Joseph Seligman and Judge Henry Hilton, the executor of the estate of A.T. Stewart, led to an event that would shake the Seligmans' faith in America. Stewart was an Irishman who had developed the A.T. Stewart department store, which had revolutionized retailing in New York and was once the city's largest department store. His estate owned the Grand Union Hotel in Saratoga, NY, which at the time was one of New York State's leading resorts and one which the Seligman family visited every summer with a significant retinue of servants.

Stewart and Hilton had been the Seligmans' commercial rivals in retailing, and in politics had been allied with the Democratic Party and Tammany Hall (which ironically was supported by most immigrant Jews). The Seligmans were staunch Republicans, and Joseph had been a member of the Committee of Seventy, which had been formed to root out the corruption of Boss Tweed. Hilton, who considered himself a leading New York businessman and political leader, was insulted by not being invited to a dinner Joseph Seligman sponsored in honor of President Grant. He therefore let it be known that the Seligmans would no longer be welcome at the Grand Union Hotel because they were Jewish. The hotel was instituting a new policy that members of the Hebrew faith could not stay there.

Joseph Seligman was outraged. While he was no stranger to anti-Semitic discrimination, which he had encountered in both Germany and as a peddler in Alabama, learning that a man of his stature could not stay at one of New York's leading hotels because he was Jewish ran contrary to everything he believed and had encountered over the past 30 years. As far as the Seligmans were concerned they were as American as any of their neighbors, and the suggestion that their religion set them apart from other Americans was deeply offensive.

Seligman did all he could to publicly fight this new policy. While it is unclear whether or not he deliberately went up to the Grand Union Hotel to be physically turned away, he did hire a public relations firm to place advertisements in leading newspapers attacking Hilton and his anti-Semitic policy, as he sought to rally public opinion in his favor. Hilton responded that he had the right under the law to exclude whoever he wanted, and that having too many Jews at his hotel was causing him to lose business. The Seligman-Hilton controversy dominated the newspapers in the summer of 1877, and Seligman received significant support for his public stand against anti-Semitism from many important clergymen, including Henry Ward Beecher, who was a leading Protestant minister in the city. To some in the Jewish community, anti-Semitism was a fact of life and Seligman's boisterous and uncompromising stance against it was counterproductive. Seligman obviously thought otherwise, and thus involuntarily became one of the city's leading fighters against anti-Semitism. There was a boycott of the A.T. Stewart department store, which likely led to its merger with Wannamakers and to Judge Hilton announcing he would give $1,000 to Jewish charities.

However, Seligman's campaign to force the Grand Union Hotel to reverse its policy on admitting Jews was ultimately unsuccessful. A number of other hotels in the Catskills instituted similar policies, which were perhaps legitimized by the actions of the Grand Union Hotel and the Seligman-Hilton fight. As a result, there developed separate gentile and Jewish hotels in the Catskills, giving rise to the Borsch belt.

Jesse Seligman's family also faced an incident of anti-Semitism that was in many ways even uglier. Jesse had been a founder of the Union League Club and for many years was an officer as well. His son, Theodore, who was a graduate of Harvard Law School, applied for admission to the Club and was rejected because of a new policy that henceforth no Jews would be admitted. Jesse was outraged, and although he was assured by other members that this was merely a policy of the admissions committee and was in no way directed toward him, he threatened to resign and asked for a full meeting of the Club to discuss the new policy. At a contentious meeting, the position of the admissions committee was narrowly upheld, and Seligman resigned.

© Douglas Kirkland/CORBIS

Historic Route 66 passes through Seligman, AZ.

At the time of their deaths, Joseph and Jesse Seligman were hailed as two of America's greatest entrepreneurs. Towns were named after them in Missouri (Seligman, MO was named after Joseph) and in Arizona (Seligman, AZ on historic Route 66), and encomiums came from leading politicians and newspapers. It was said that at the time of their deaths they were deeply troubled by the latent and rising anti-Semitism they had encountered, and had deep concerns about the future of Jews in America. However, they were very proud of J.W. Seligman & Co. and hoped it would endure to become a major financial institution like the House of Rothschild.

In reality, J.W. Seligman & Co. did continue to exist, but its position as America's leading Jewish investment banking house was soon overtaken by such rivals as Kuhn Loeb, Lehman Brothers and Goldman Sachs. Later in the 20th century, parts of it were acquired by Blyth Eastman Dillon and Tricontinental Corp. However, the fight they had championed against anti-Semitism in New York and throughout the US continued.

In alliance with other minority groups, discriminatory » *continued on page 39*

Checks and Balances

continued from page 24

George W. Bush's terms, however, and half of them were over 2% of GDP. Under Obama, government deficits have topped 10% of GDP, twice those recorded under Reagan and completely unprecedented in peacetime.

Partisans naturally want to blame their political enemies for this stark disintegration of federal fiscal discipline, but clearly long-term forces were at play. During the third epoch government expenditures grew in nominal terms every year but revenue growth was much more sporadic and sometimes negative. Revenue growth exceeded expenditure growth in 20 out of the last 36 years, but total expenditure growth over the period outpaced total revenue growth by some 50%. The cause of chronic deficits was therefore two-fold: expenditures increased faster than revenues on average and revenues were much more volatile than expenditures.

Both of those problems can be traced to the Great Depression. Nominal government expenditures have increased every year since 1965 because entitlement programs like Social Security and Medicare grow ever larger due to demographic changes (e.g., an aging population), general inflation and runaway medical costs. Social Security was of course a New Deal program. Its biggest fault was that it provided a permanent solution to a temporary problem, the growth in the number of the aged indigent. Before the Depression, the elderly were no more likely to live in poverty than members of any other age group were. As their wages declined as they aged, most Americans compensated by investing in financial (e.g., annuities), real (e.g., rental houses) and familial (e.g., working children) assets.

The Depression temporarily depressed all three income streams, leaving many retirees destitute. Instead of seeing them through the crisis and allowing the private security system to continue to evolve, the government instead enacted Social Security, in part to prevent the passage of even more radical plans like that of Francis Townsend (1867–1960). Forced to save through Social Security, many postwar Americans allowed the private security safety net to wither and thus became increasingly reliant on the government to provide for their retirement. Soon Social Security became the third rail of US politics, a program often expanded but only occasionally and marginally retrenched.

Medicare's connection to the Depression was less direct but no less real. During the Depression, the government disassembled the nation's first health insurance system, which was dominated by low cost mutuals and pre-paid medical care providers compensated for curing patients rather than just seeing them. In its place, the government encouraged the creation of a new system based on for-profit insurers, employer-provided insurance and a pay-for-service model. All three innovations encouraged continual cost increases to satiate stockholders and healthcare providers. By the 1960s, many older Americans found it increasingly difficult to obtain or pay for healthcare. Rather than try to reduce costs, the government provided retirees with a heavily subsidized healthcare program that actually accelerated healthcare cost pressures in myriad ways. Those costs, which continue to rise faster than inflation, combined with increases in longevity mean that Medicare, not Social Security, is currently considered the nation's biggest budget buster.

The variability of government revenues is a by-product of Keynesian economics, another Depression-era innovation. According to Keynesians, governments should increase spending during recessions in order to stimulate the economy. (Output equals consumption plus business investment plus government spending plus net exports. Increases in government spending, Keynesians claim, can offset decreases in the other three, especially investment.) Of course government revenues drop during recessions, so the increased spending Keynesians call for must be financed by borrowing. Although few describe themselves as Keynesians, most postwar US Presidents have increased government spending during recessions. Revenues turned negative during three of the last four recessions, but expenditures continued to grow and even accelerated during the last two. Roosevelt's failed attempt to balance the budget in 1937, which according to Keynesians caused that year's recession, was invoked as recently as the Great Contraction of 2008–9 to justify various economic stimulus plans and continued high levels of government expenditure. So while the effectiveness of Keynesian stimulus is hotly debated among academics, no President is likely to move significantly toward a balanced budget when the economy is on the skids. This *de facto* Keynesian policy consensus has precluded serious consideration of alternative tax regimes. Contingent or standby taxes that would kick in when large deficits loomed were briefly employed during the Reagan administration, but the 18th-century notion of directly tying taxes to expenditures in peacetime has largely been lost and is unlikely to be resuscitated as long as policymakers continue to think of deficit financing as a key macroeconomic stabilizer.

So the next time you want to bash your favorite political enemy over the head, think about blaming the Great Depression instead. Maybe then we can work together to actually end the age of deficits. **$**

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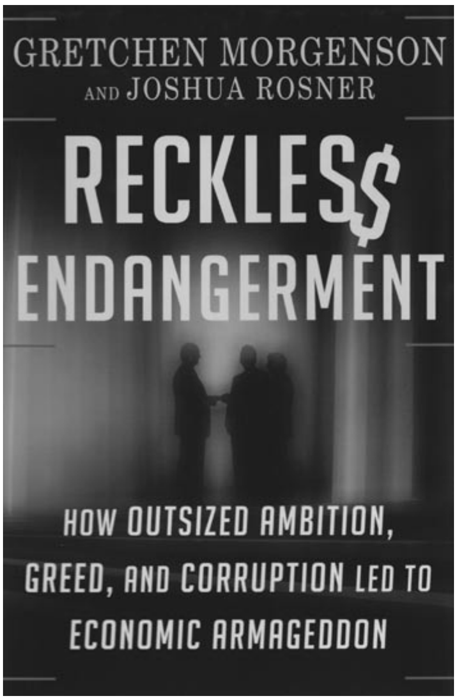
Notes

1. http://archives.clintonpresidentialcenter.org/?u=010699-speech-by-president-on-the-surplus-for-fy.htm
2. Emphasis in original as quoted in Wright, *One Nation Under Debt*, 274.

Reckless Endangerment: How Outsized Ambition, Greed, and Corruption Led to Economic Armageddon



By Gretchen Morgenson
and Joshua Rosner
Times Books/Henry Holt & Co.,
New York, 2011
331 pages, with notes and index
$30.00

"Bubblicious." Morgenson and Rosner actually call the conditions leading up to the economic collapse in 2008 "bubblicious." Perhaps the authors are referring to the 1980's ad campaign for the chewing gum of that name to imply that the real estate and financial markets before the recession were "the ultimate bubble"?

Or maybe they are just lightening up a bit, as the reference comes 229 ever-so-earnest pages into the book. As any regular reader of Morgenson's newspaper columns knows, the journalist is a direct descendant of the muckraking reporters of decades past, and she does high dudgeon admirably well. Rosner, an analyst and researcher, buttresses Morgenson's ample Street cred.

Together they do an excellent job of detailing how the financial crisis was not the disastrous convergence of irrational exuberance. Rather it was the implosion of deliberate and despicable schemes by a few malefactors of great wealth, and the inaction of many regulators and legislators.

The typeface is sharp and the leading sufficient to make reading effortless. The writing is brisk and clear, but without much flair or the touches of irony Morgenson sometimes brings to her columns. Certainly the authors have not dumbed down their material—as if collateralized debt obligations and securitized mortgages could be dumbed down—but the reader is left to proceed through the forensics with little sense of narrative energy, just outrage.

Fair enough: The bad guys are venal, self-dealing, treacherous. The good guys are sincere, diligent and honorable. The offenses are egregious, the trail obvious, the authorities oblivious. Still, the tone seems just a little too righteous.

Bad Guy in Chief is James A. Johnson, chief executive of the Federal National Mortgage Association, Fannie Mae. The linear vector of this book is how Johnson took Fannie Mae from a sleepy supplier of liquidity to the national housing market, to the mothership of the housing bubble. He did this, the authors say, for the hoary goals of enriching himself and his allies.

His opening came when Fannie and its cousin Freddie Mac were given a new mission: affordable housing. The saddest revelation in the book is that in building the housing bubble the perpetrators played their hand perfectly, taking advantage of policies, politics and practices meant to help the disadvantaged.

With everyone from Presidents Clinton and Bush to members of Congress pressing for an expansion of home ownership, the road to hell was paved with good intentions. Fannie could not originate mortgages, so Johnson turned to outfits like Countrywide under Angelo Mozilo to cook up things like "ninja" loans for people with no income and no jobs.

It was universally taken on faith that pushing home ownership was good for everyone. The originators were making billions in fees. Fannie and Freddie were making billions repackaging the mortgages. Wall Street dazzled itself with financial engineering. Along the way they all co-opted legislators and regulators from Fed Chairman Alan Greenspan on down, who kept insisting it was all well under control.

The authors are diligent in naming names and citing numerous examples of brave voices who tried to ring the alarm, but were either ignored or overruled. They have told a complex and compelling story clearly in a manageable amount of pages. The book closes in 2008 with the dive in the stock markets, adding only the tersest of where-are-they-know epilogues.

Morgenson and Rosner have done an excellent job of explaining, summarizing and reporting. They tell the story and leave it at that. The reader is left informed, but not entirely fulfilled, as if having finished a healthy meal of vegetables and complex carbohydrates, substantial, but not as savory as perhaps it could have been. $

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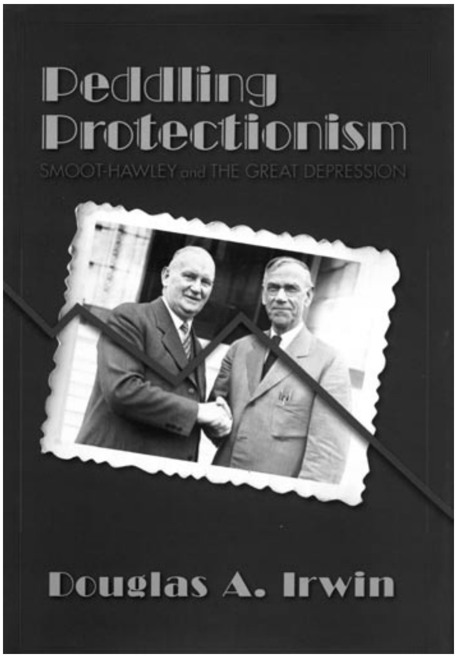
Peddling Protectionism: Smoot-Hawley and the Great Depression



By Douglas A. Irwin
Princeton University Press, 2011
244 pages
$24.95

Peddling Protectionism is the compelling summary of economist Douglas A. Irwin's multi-decade examination of trade policy, including the infamous Smoot-Hawley Tariff of 1930. It describes the background, rationale, crafting and consequences of a law that was neither a major cause of the Great Depression nor a benign attempt to curry political favor with a particular voting bloc. Those voicing divergent opinions about the treaties being considered by the current Congress would benefit from this slim volume, which describes the lessons embedded in the story of an iconic piece of trade legislation.

Irwin starts his narrative with the history of the country's tariff policy and a description of the economy of the 1920s. His subsequent account of the 13-month legislative history of what was officially called the Smoot-Hawley Tariff Act of 1930 is quite illuminating. It traces the nature of log-rolling and vote-trading that transformed the initial notion of raising the protective tariff on some agricultural goods into a law of broad coverage and complexity. Importantly, it also acknowledges the reality that Smoot-Hawley was being debated and crafted against the backdrop of a steadily worsening economy. Ultimately, the law was not passed by dispassionate lawmakers trying to craft the best possible bill to meet an urgent national need, but by political actors catering to the special desires of their constituents. Lobbyists and special interest groups may not have initiated this effort to raise tariffs, but they definitely influenced the bill's provisions as it made its way through the legislative process.

It is difficult to fully assess Smoot-Hawley's direct economic impact. It certainly raised import duties on a wide variety of products, but severe deflation caused import prices to fall, and the total value of dutiable and non-dutiable imports fell steadily as the GDP declined in the worsening depression. While looking closely at the tariff's impact on a variety of economic indicators, Irwin also weaves factors such as the gold standard, Federal Reserve policy and the business cycle into his analysis. Even while trying to disentangle those threads, he notes the difficulty of isolating the contribution of the new tariff, since so many different shocks were hitting the economy in the early 1930s.

It seems clear to many economists that Smoot-Hawley contributed heavily to a new climate of protectionism around the world. The author describes many expressions of hostility towards the law as well as the retaliatory tariffs imposed by important trading partners such as Canada, Cuba and several countries in Western Europe. He cites instances in which the new tariff backfired, as other countries raised their own tariffs and depressed the level of US exports. Further, he details the actions of many countries that used Smoot-Hawley as a justification for revisiting the nature of their own tariff policies; such changes often disrupted long-standing trading relationships for decades to come.

In his final chapter, Irwin discusses the discomfiting legacy of the Smoot-Hawley Tariff. It was a low point in the evolution of congressional trade policy that not only failed as a protective measure for selected US industries but also opened a new era of protectionism. In the subsequent years, the world's industrial economies negotiated numerous multilateral and bilateral trade agreements that have reduced the average US tariff on dutiable goods to 5%, versus 45% in 1930. While Smoot-Hawley's economic impact has long since faded into irrelevance, its political aspects are still discussed and worth remembering by every party involved in formulating today's trade policy. $

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Joseph & Jesse Seligman

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covenants in housing and other matters in the early 20th century were defeated in Harlem and later throughout the city. By the 1960s, civil rights laws outlawed discrimination in hotel accommodations, private club membership and employment. In the 1980s, Jewish entrepreneurs on Wall Street such as Michael Milken and Bruce Wasserstein would be direct beneficiaries of those efforts. Joseph and Jesse Seligman's decision to take an uncompromising stand against anti-Semitism is probably today considered their greatest legacy. $

James S. Kaplan is the head of the tax and estates department at the Manhattan law firm of Herzfeld & Rubin, P.C. and a walking tour historian. For the past 24 years he has annually, with Richard M. Warshauer, given a walking tour of the Financial District entitled "The Great Crashes of Wall Street" under the auspices of the Museum of American Finance. He has also given a number of walking tours on the history of the Jews in New York. On these tours he covers Joseph and Jesse Seligman.

HOW MUCH DO YOU KNOW ABOUT FINANCIAL HISTORY?

TRIVIA QUIZ

By Bob Shabazian

1. Who were Wall Street's first female stock brokers?

2. What company, formed as an express mail business in 1850, moved into financial services by starting money order operations 32 years later?

3. What event in 1859 was a factor in the demise of the whaling industry in America?

4. What happened to the Glass-Steagall Act of 1933, which separated commercial and investment banking?

5. The Dow Jones Industrial Average closed above 10,000 on March 29, 1999. Five weeks later the average reached another milestone. What was it?

6. Whose portrait appears on the $5,000 bill?

7. What bank was originally located in the Museum's current home at 48 Wall Street?

8. In what year did the nation's first financial panic occur?

9. Name the three founders of Dow Jones & Company.

10. In what year did the Dow Jones Industrial Average close above 100 for the first time?

ANSWERS

1. Sisters Tennessee Claflin and Victoria Claflin Woodhull **2.** American Express Co. **3.** The discovery of oil in western Pennsylvania. **4.** Congress repealed it in 1999. **5.** The DJIA closed above 11,000. **6.** James Madison **7.** The Bank of New York **8.** 1792 **9.** Charles Dow, Edward Jones and Charles Bergstresser **10.** 1906.

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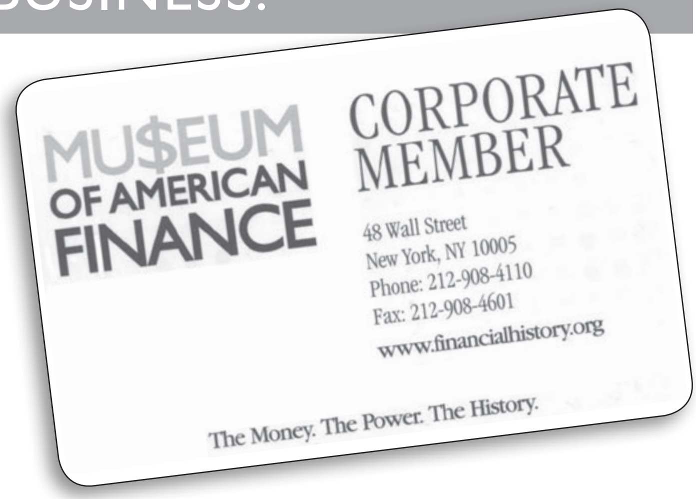

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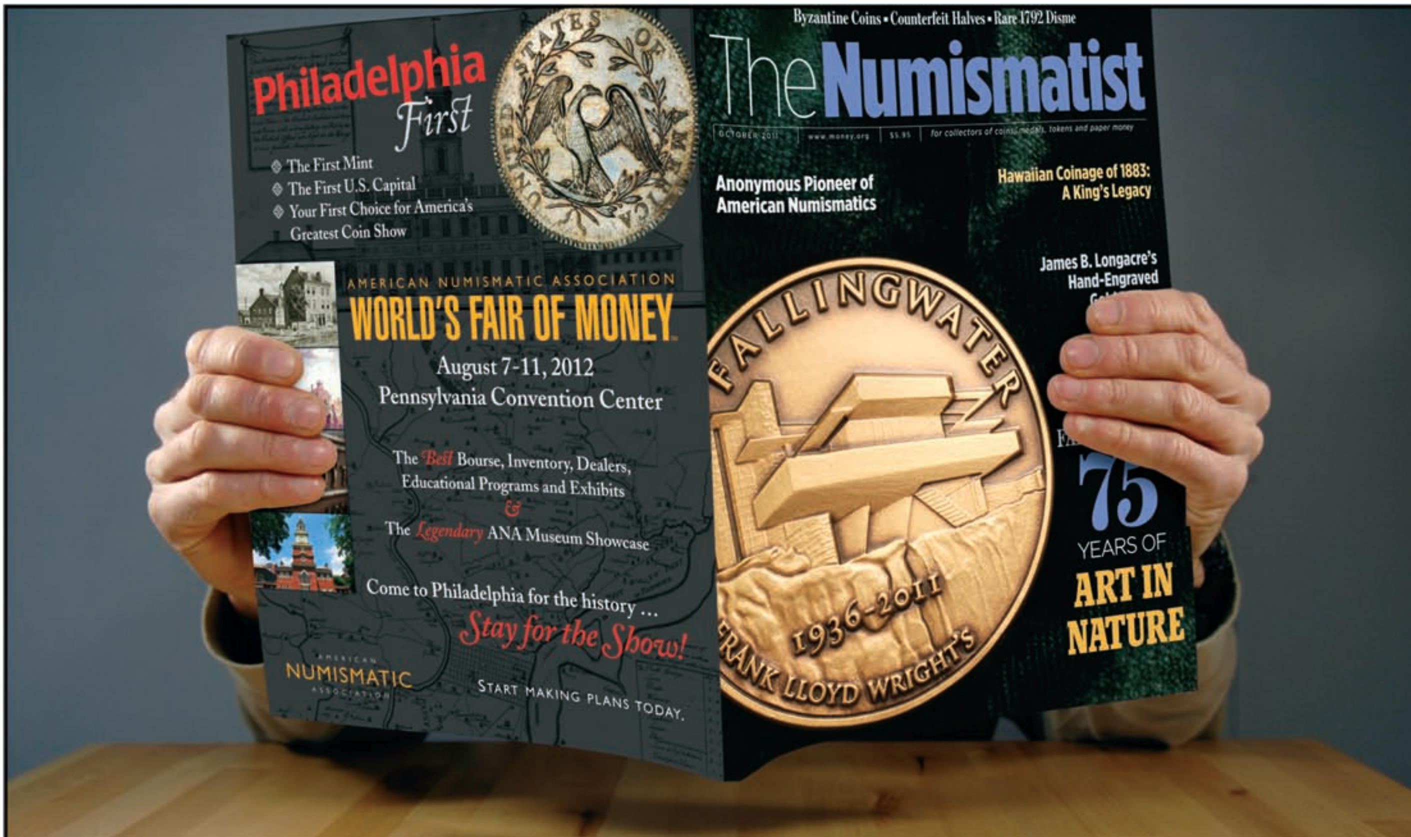
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